



Woodbeck
Cabin Plan Book

Digitized by



ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

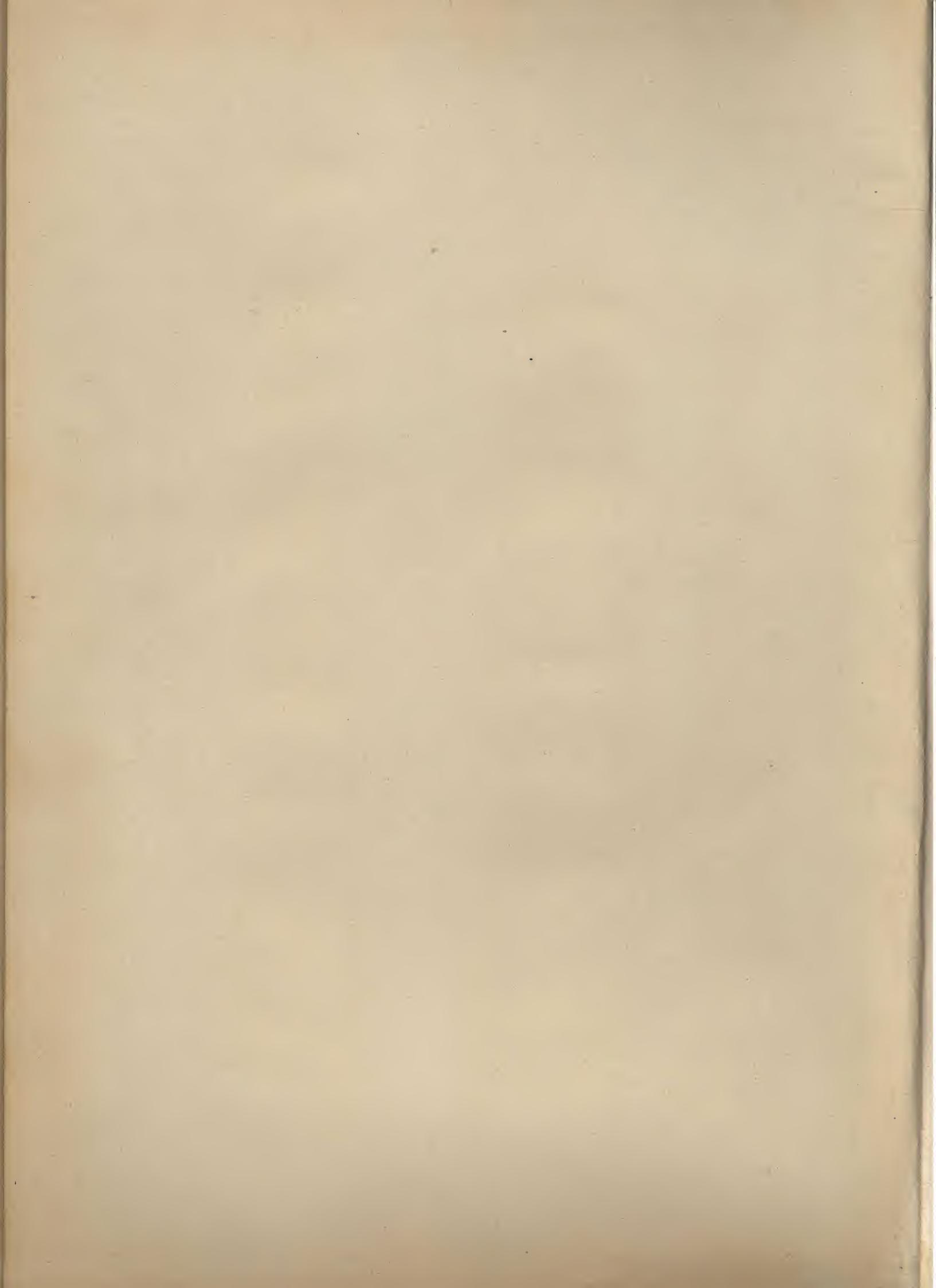
From the collection of:

Alan O'Bright

R.W. Sandstone

(Anderson's
comp.)

NUC located one copy



Cabin Plan Book

WOODBECK PUBLISHING CO.
Grand Rapids, Michigan

Copyright

WOODBECK PUBLISHING COMPANY
GRAND RAPIDS, MICHIGAN

Published — 1939

Second Printing — 1946

"Cabin Plan Book" was compiled at the suggestion of numerous of my friends who wanted a book showing a multitude of floor plan combinations. The black and white drawings of exterior views, together with floor plans, are offered as suggestions. In addition to the exterior drawings and their individual floor lay outs, are included many floor plans around which your individual ideas may be incorporated.

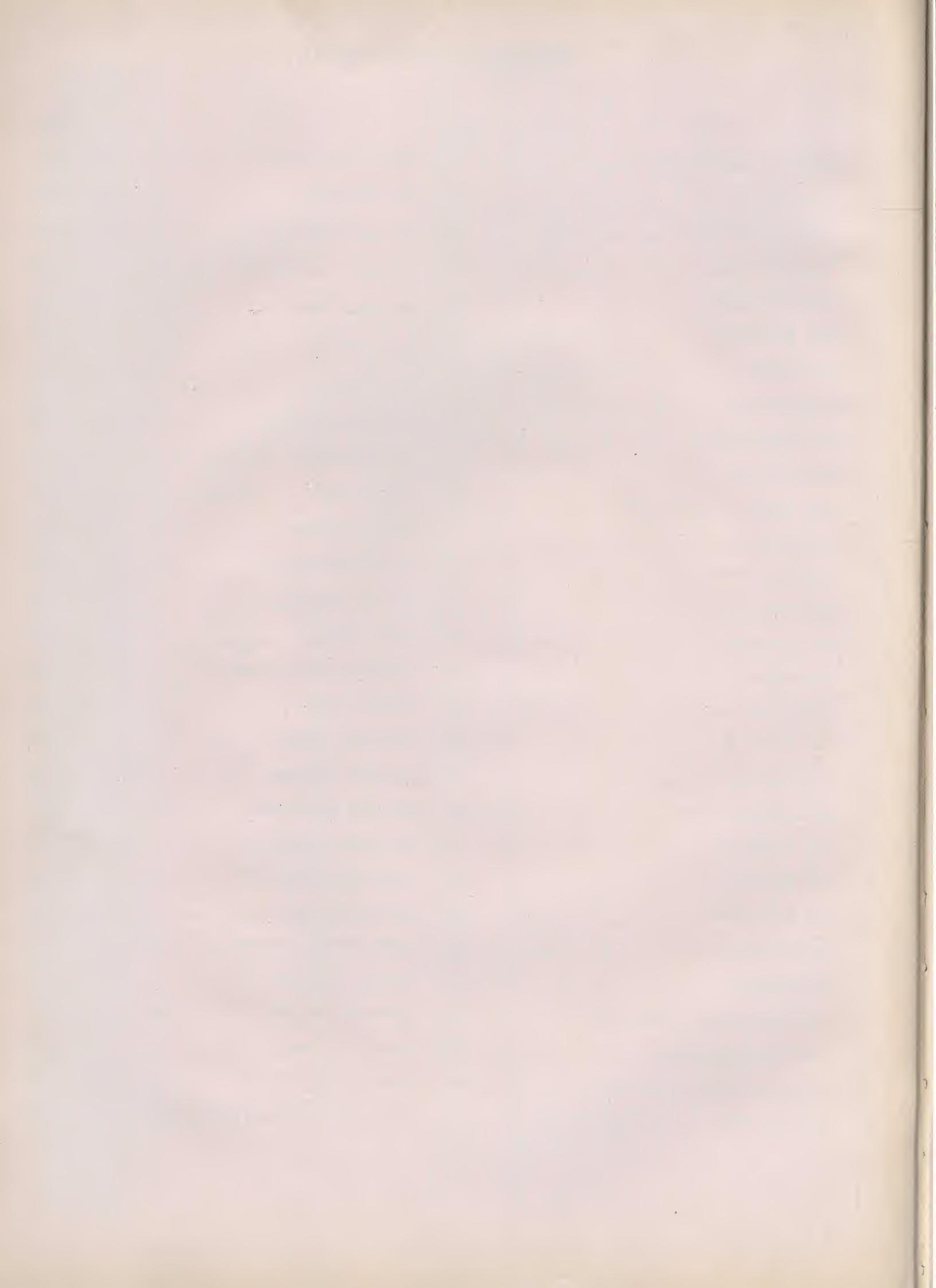
I extend my sincere thanks for the multitude of snap shots and drawings that have been sent in to me, together with other information that was used in compiling this book. As in the case of all good things, I have accepted suggestions from many of my friends, who over a period of years collected various data and other information on the subject presented.

DAVID L. ANDERSON

San Francisco

TABLE OF CONTENTS

	Page		Page
GENERAL INFORMATION	7	THE TOURIST CABIN	41
THE PIONEER	11	THE WINNIPAUK	42
THE KLAMATH FALLS	12	THE MONTEREY	43
THE PATCHOQUE	13	THE SANTA BARBARA	44
THE LOS GATOS	14	THE LAKE GENEVA	45
THE WOODSIDE	15	THE SAUSALITO	46
THE ALPENA	16	THE CORONADO	47
THE ATLANTA	17	THE NEW BEDFORD	48
THE NANTUCKET	18	THE KULIOUOU	49
THE KOKOMO	19	THE LA JOLLA	50
THE TAHOE—LUMBER LIST	20	THE GUADALUPE	51
THE PHOENIX	22	PORCH SUGGESTIONS	52
THE DOWAGIAC	23	CABIN ELEVATIONS	53
THE KALKASKA	24	FLOOR PLANS	54
THE MICHIANA	25	PREFABRICATED HOMES	62
THE FOND DU LAC	26	TOVELL HOUSES	63
THE SAUGATUCK	27	GUNNISON HOMES	65
THE CHOPTANK	28	QUONSET BUILDING	68
THE NORFOLK	29	DOUGLAS FIR HOUSES	70
THE NARRAGANSETT	30	HODGSON HOUSES	72
THE COLORADO	31	WESTERN PINE HOUSES	76
THE LAS VEGAS	32	SEWAGE DISPOSAL PLAN	77
THE MERIDIAN	33	INTERIOR SUGGESTIONS	78
THE WOODBECK	34	THYER FURNITURE	80
THE MAHOPAC	35	OUTDOOR BARBECUE SUGGESTIONS	81
THE SAN RAFAEL—LUMBER LIST	36	FIREPLACE CONSTRUCTION	82
THE WINNEPESAUKEE	38	BOAT BUILDING DETAIL	85
THE MOOSEHEAD	39	DOCK AND FLOAT SUGGESTIONS	88
THE SAN DIEGO	40		



General Information

YOU WILL AGREE that we are all different, not only in our desires and ambitions, but in our ability to secure that which we want and that for which we can afford to pay. From the earliest American Settlement to the present city, suburban or other terrain, we all seem to want a cabin, cottage or other type of structure away from where we normally make our residence. "Cabin Plan Book" has been assembled with a view to giving numerous ideas on just what the title denotes. In the average American mind a cabin may be a true log cabin, a wood clap-board shack, or the type of homes, and homes they are, that are shown in the following pages.

LOCATION: Careful planning is the important feature in handling an enterprise of this nature. For years, innumerable cabins and cottages have been built that were to be dream houses of the occupants. Unfortunately, no intelligent planning or other considerations were looked into prior to selecting the site, or deciding upon the materials from which the house was to be constructed. A lake, mountain, or sea-shore location may appeal to one type of person and be entirely unsatisfactory to another. This is a matter for your own selection and judgment. BUT before choosing a lot, wherever it may be, consider the following suggestions if they apply to the site you have in mind. If you had hoped for a definite ideal setting it should be tempered with good judgment. If you choose a lake front or sea-shore site, ascertain the high water mark during the spring storms and place your foundation sufficiently back to be away from danger. Also, if building along sandy beaches, inspect carefully the possibility of the front yard being washed away when high water prevails. In an area surrounded by woods, there is always danger of forest fires, and while a suitable clearing will undoubtedly be made around your cabin home in the woods, check the prevailing winds and do not build on a site that cannot be defended by fire trails. A final consideration in locating one's cabin is the view. This again is a personal matter. Some people like to look out into the woods, while others much prefer the view of a lake or running stream. Situate your cabin so that your view will not be obstructed by poles if high power or telephone lines are brought in. If a garage is required, its location and relation to the dwelling should be settled on.

PLANS: Normally speaking, many cabins and cottages are erected without the benefit of architectural design of any nature. This is not the best procedure to follow, and unfortunately some people are of the opinion that a floor layout, *plan is all that is needed in order to proceed with construction. While floor plans are very necessary in laying out the size and arrangement of rooms, they are inadequate as a guide to the individual building his own log cabin or to the*

builder to whom he assigns the job. It is impossible to estimate the quantity and type of materials needed without elevations. If the prospective cabin builder is unable to prepare a set of plans, he would be wise to consult an architect. For complete construction details write us. From your rough sketches we will prepare scale drawings, material lists and suggestions for building methods.

SEWAGE: Proper sewage is of great importance principally because of its relation to the water supply. The septic tank, cesspool, or outdoor toilet should be placed in such a position that the drainage will run in an opposite direction and to a lower level from that at which you secure your water. Where modern conveniences are installed, cast iron soil pipe should be placed with a grade of at least one-fourth inch per foot. The main line to the septic tank or cesspool should be at least 4 inches in diameter, as well as the lines from the toilets. The diameters of the connections from the washbasin, showers and sink, which may be of brass, should be in accordance with the recommendations of the manufacturers of the equipment.

PLUMBING: Copper pipe that will last a lifetime and is easy to install is highly recommended for cabin plumbing. Normally the cabin water supply does not carry too much pressure or volume and where a three-quarter-inch pipe would be sufficient for a city residence, it is much better to use at least a 1-inch pipe. In the colder sections of the country water pipes freeze if not insulated. If the cabin has a wooden floor, the water pipes may be insulated by placing them under the floor. To further insure against frozen pipes, water lines and tanks should be so arranged that they can be drained and a shut-off valve should be located near the water supply. If hot water is to be a part of your plan for comfort, these pipes also should be fitted with the necessary shut-off and drain arrangement.

As an added precaution, it is always advisable to have an outside faucet at the front and rear of your cabin so that if in emergency you need water for fire fighting, it is available.

BATHROOM: Even in a cabin home in the remote backwoods the luxury of a modern bathroom is a "must." The number of bathrooms in your cabin will vary with its size and your proposed financial expenditure. Normally speaking, the average two-bedroom cabin is sufficiently served by one bathroom. Larger, more elaborate summer homes will require additional facilities.

Silent toilets in small cabins save considerable embarrassment due to close living. The problem of bathtub or shower stall may be somewhat simplified by installing a bathtub with shower over it, but this again is a question of personal preference.

It is always desirable, if possible, to have a window in the bathroom, not only for general daytime light, but for ventilation in the summertime as well.

It is also advisable, depending on your location, to check the size of the window in your bathroom as a small window set high in the wall gives greater privacy.

OUTDOOR "CONVENIENCES": Due to circumstances rather than choice, the old-fashioned backhouse or privy is still used extensively. If the outdoor toilet is properly constructed, it is entirely satisfactory. The pit must be deep, not less than 5 feet and preferably 6 feet. The inside unit should be properly boxed, cracks should be avoided in the lumber and the joints should be covered with battens. In other words, it must be flyproof. This also includes the seat cover, which should be so hung that when not in use it will automatically drop. While in foul weather a long trek is not particularly pleasant to contemplate, the toilet should be at least 75 feet from the cabin, and preferably 125 feet distant. The outdoor toilet can be constructed along modern lines, finished and painted, so as to fit in with surrounding architecture and color scheme. Thick shrubbery or vines may be used to enclose it.

LOG CABINS: Many individuals talk about the desire to build "An Old Fashioned Log Cabin." In actual practice an uncalked pioneer log cabin without modern conveniences is most unwelcome. Log cabins do not follow any definite pattern, but unquestionably are all constructed more or less as those used by the early pioneers in this country. With this in mind, they should follow the traditional trend such as heavy logs, rough finish, often with only one large room but in the case of we moderns, sanitary conveniences should be included. Log cabin design typical of the earlier days roughly covers the following:

1. Shingle or shake roofs that are low and with not too high a pitch.
2. Wide windows set high, containing small panes.
3. Rough, but not sloppy axe work to keep in the general trend.
4. Hardware of wrought iron or in keeping with the rest of the cabin.
5. Natural stone fireplaces and brick hearths.

LOGS AND LOG TREATMENT: The sills and all wooden members below the floor line should be treated with some good standard termite preventative. The additional time and effort in taking this precaution will more than pay the cabin owner over a period of a few years. Consult your local supply house and procure any good standard brand.

Many people like to leave the bark on their logs. Just a suggestion: Bark has a habit of hiding insects and they are an untold source of trouble as well as a continual nuisance. A draw shave, or hand stripping is an easy way to remove the bark. It is not difficult, and will give you clean logs that may be treated with the termite solution before mentioned. Green logs should be piled far enough apart and staggered so as to allow a free flow of air for drying. Green logs require approximately four months of air drying before they may be used with complete satisfaction.

In passing, we should like to offer a few suggestions in your choice of logs. Soft woods rather than hardwoods will be found much easier to work. Pine, bass and hemlock work up easily into logs. Oak logs, even though thor-

oughly dried and fitted into place, have a habit of changing form a year or two after the cabin is completed. Oak will twist and pull your entire cabin out of line.

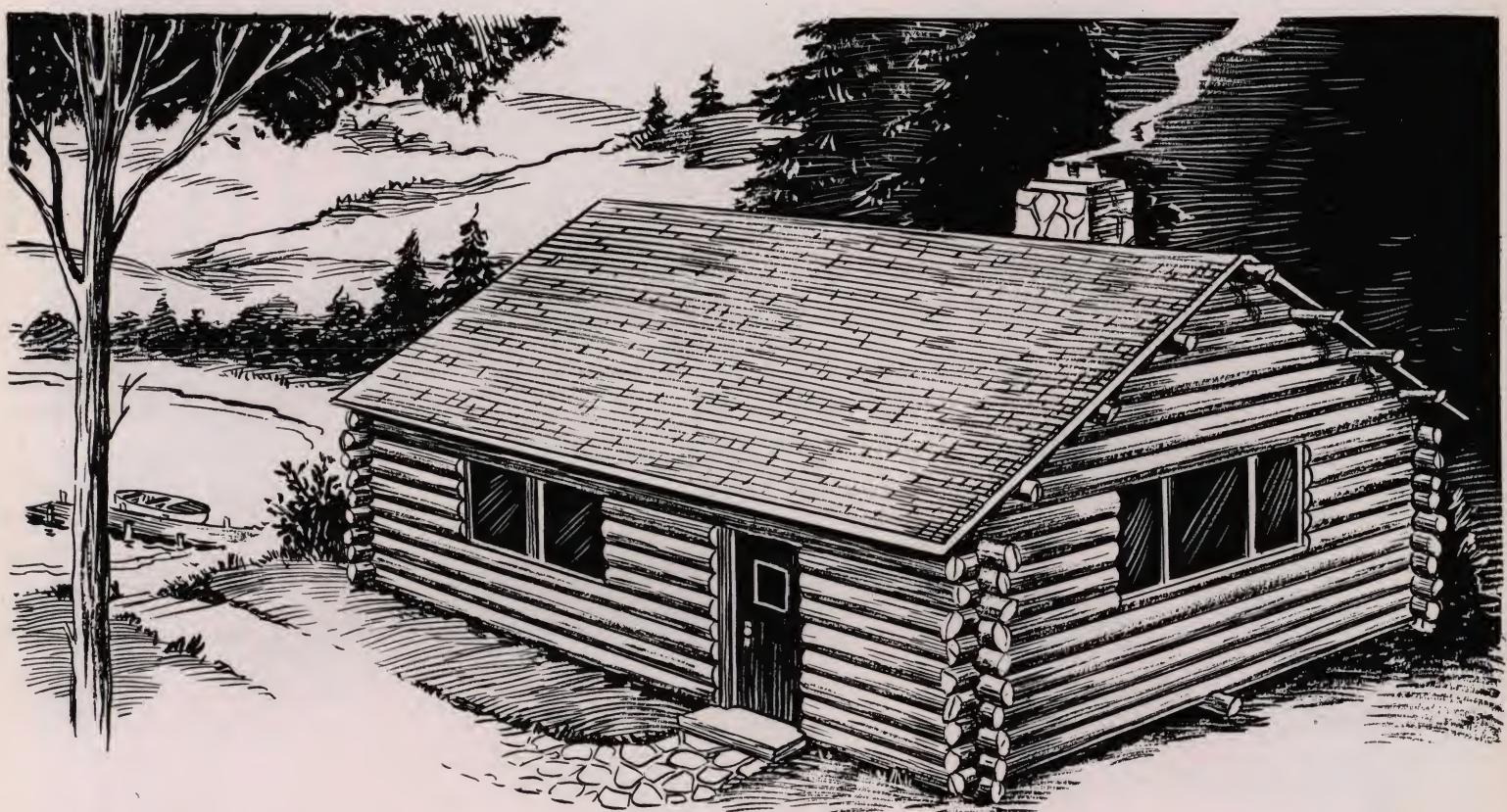
COSTS: During the past few years the subject of costs has been difficult to ascertain in advance. Since late 1939, due to rising material and labor expenses, an estimate in the Spring would be out of line in a few months. In the opinion of many, building costs are following a slowly rising pattern, however, hundreds of successful cabins and cottages have been constructed by their owners with the use of local help. In this instance greater supervision of the building must be exercised, but the construction is relatively cheaper.

Just because logs grow on trees, many persons believe that a log cabin is the most inexpensive type of building that can be built. Unfortunately this is not true, because logs are potential lumber. The individual or concern from whom you buy your logs makes you a price which varies in accordance with the amount he thinks he can get for his logs from a saw-mill owner. If you are fortunate enough to secure a piece of land covered with trees, from which you may secure your own logs, your problem of expense is correspondingly reduced.

In the early days when lumber was readily available the cost of log cabins may have been assumed to be less than conventional buildings similar in size but using finished lumber. This might continue to be true if it were not for the increased labor costs necessary to fashion rough timbers to the desired size and shape. In log cabin construction one runs into the slow and painstaking job of fitting the logs. It must be constantly kept in mind that it takes much longer to fit a log properly than it does to nail a board in place. It is difficult to give any definite figures as to the expense of fitting logs at this time, however, many concerns now supply direct from the mill, synthetic split logs and horizontal or vertical round logs that are grooved for easy construction.

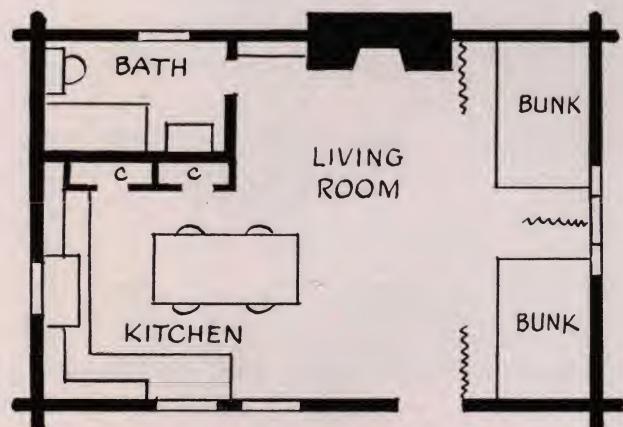
Prefabricated cabins have become increasingly popular during the past years, and outstanding concerns such as the E. F. Hodgson Company of Boston, Massachusetts and New York City have, since 1900, supplied thousands of prefabricated cottages, cabins and homes, some costing as much as \$12,000.00. In our opinion there is a definite advantage in availing one's self of prefabricated cabins and cottages. This by no means precludes the desirability of constructing a cottage in the normal manner and is again a matter left entirely to the judgment of the prospect owner.

WE DO NOT attempt to plan your particular cabin, because your individual tastes, your special needs, and financial ability may differ greatly from those of other persons looking for ideas in this book. We suggest that you do not start up sixty miles an hour in securing either your lot or acreage, and that after this is acquired, you very slowly make up your mind as to what type of cabin or cottage you want. In the final analysis, it is better to spend a reasonable length of time over your plans rather than to rush into building an undesirable structure. A summer home should be of constant and increasing pleasure to the owner.



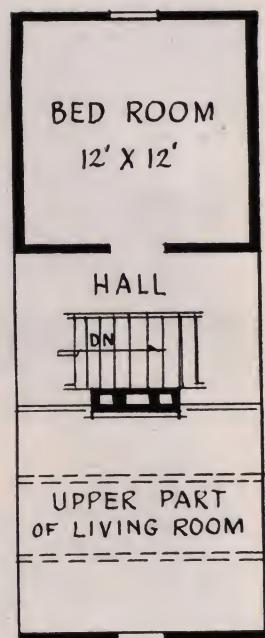
The Pioneer

This typical log cabin suitable for a hunting retreat or summer home, combines modern conveniences with pioneer atmosphere.



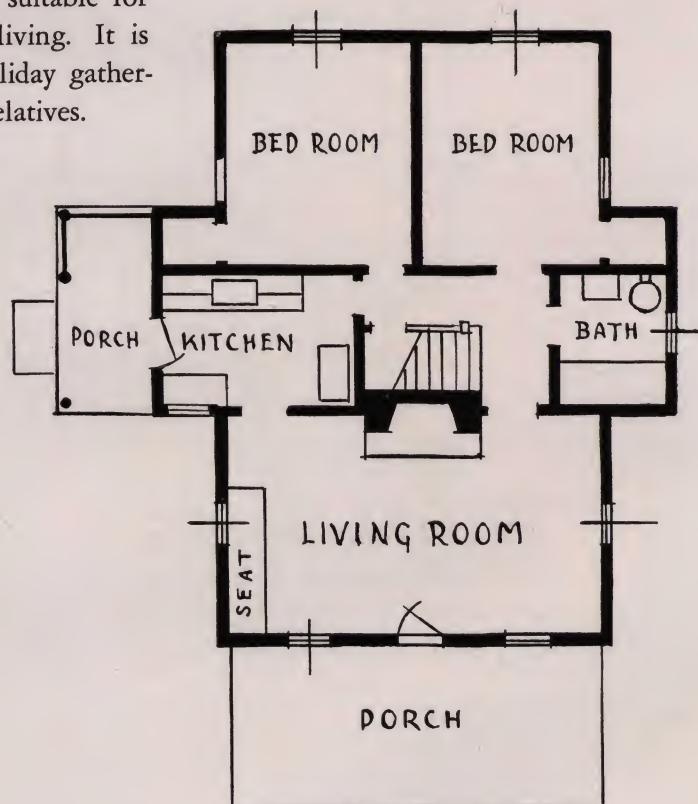


SECOND
FLOOR
PLAN



The Klamath Falls

Finished in pioneer style, this spacious log house is suitable for summer and winter living. It is just the thing for holiday gatherings of friends and relatives.





The Patchoque

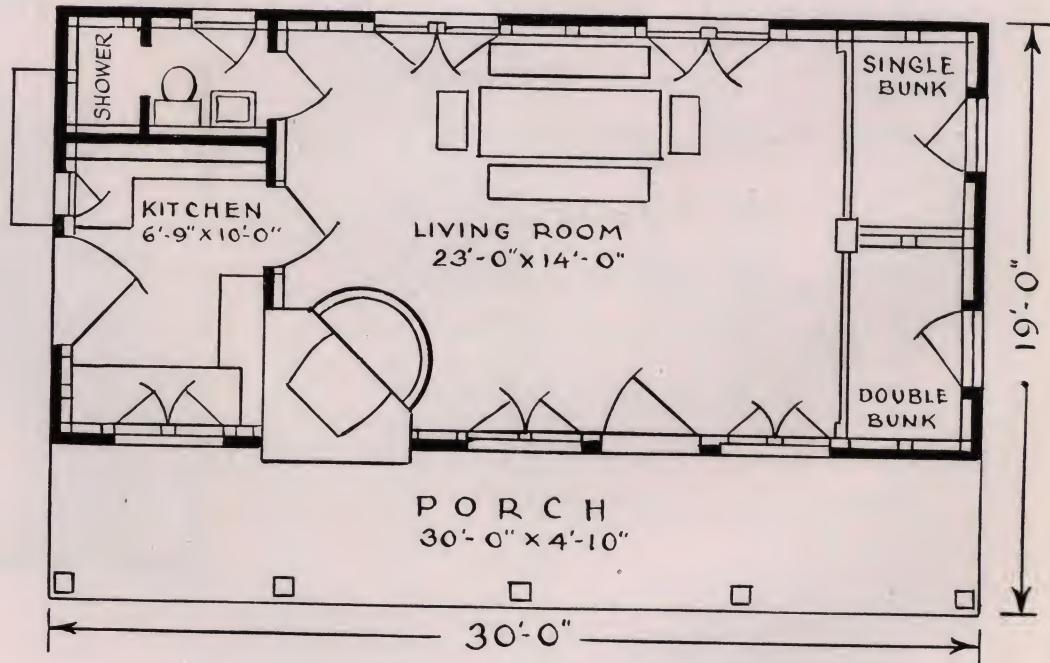
The Patchoque is typical of log cabins built of manufactured half round logs.

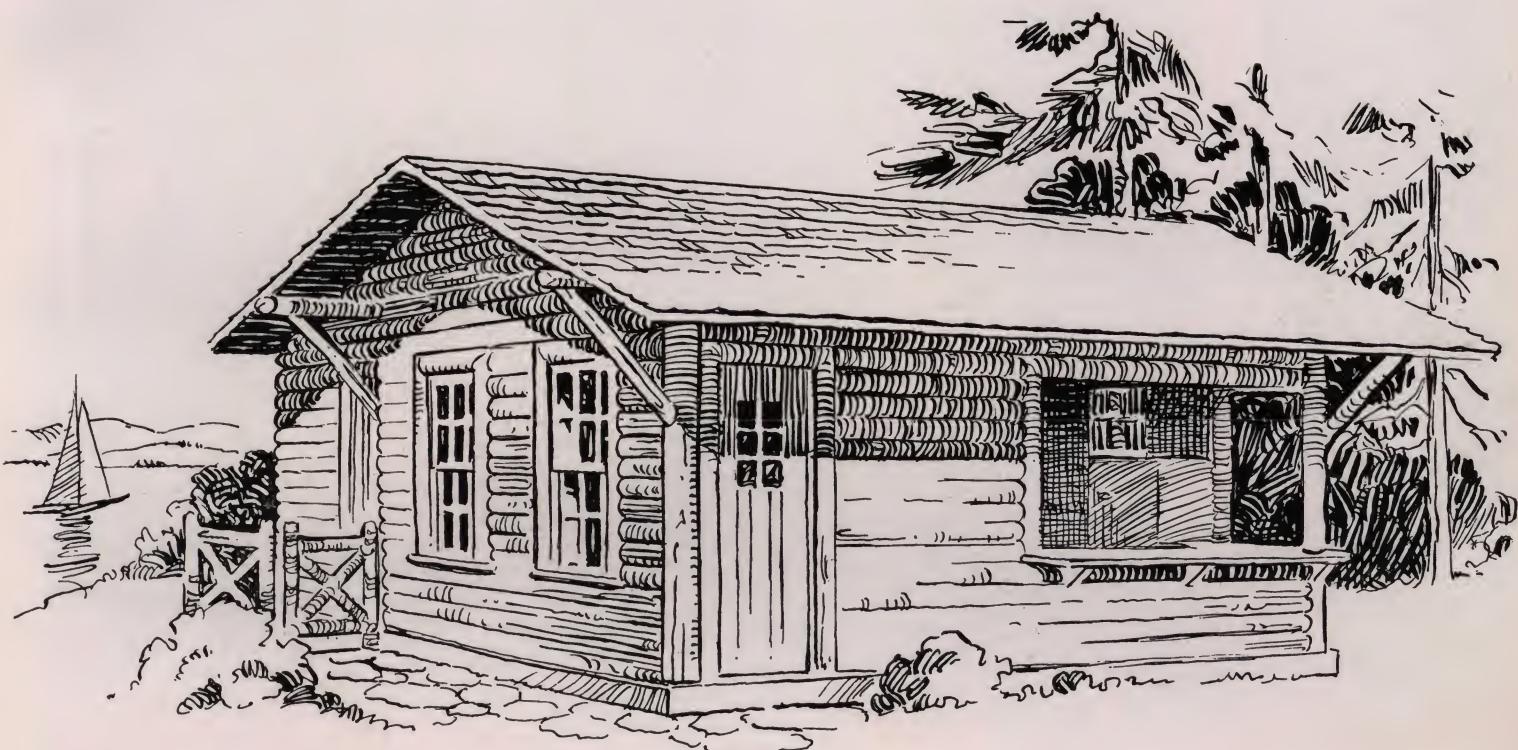




The Los Gatos

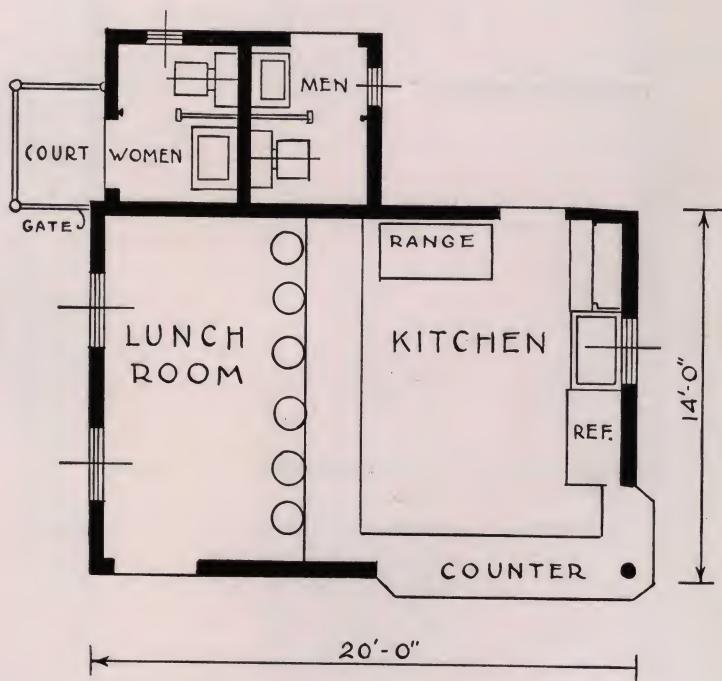
The Los Gatos is symbolic of many cabins built in the Santa Cruz mountain region of California, but a single glance shows that this cabin fits any locality. One to eight persons can be accommodated, depending upon the use of single or double bunks.

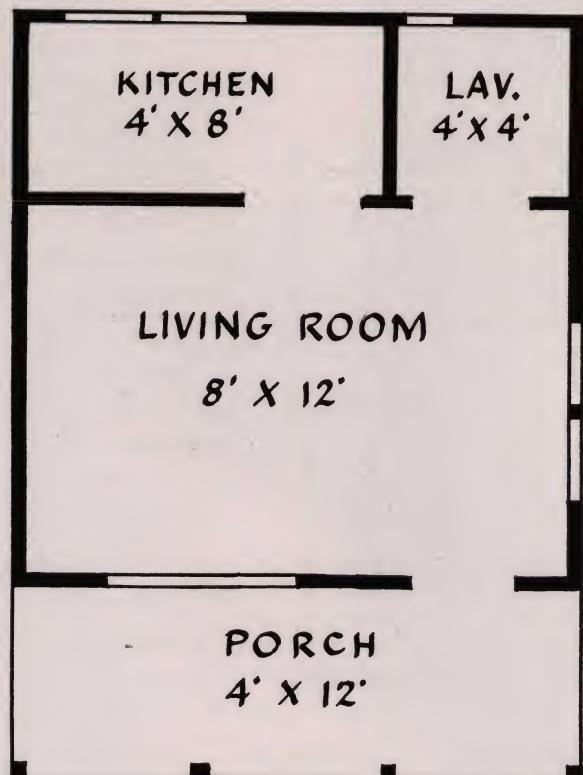
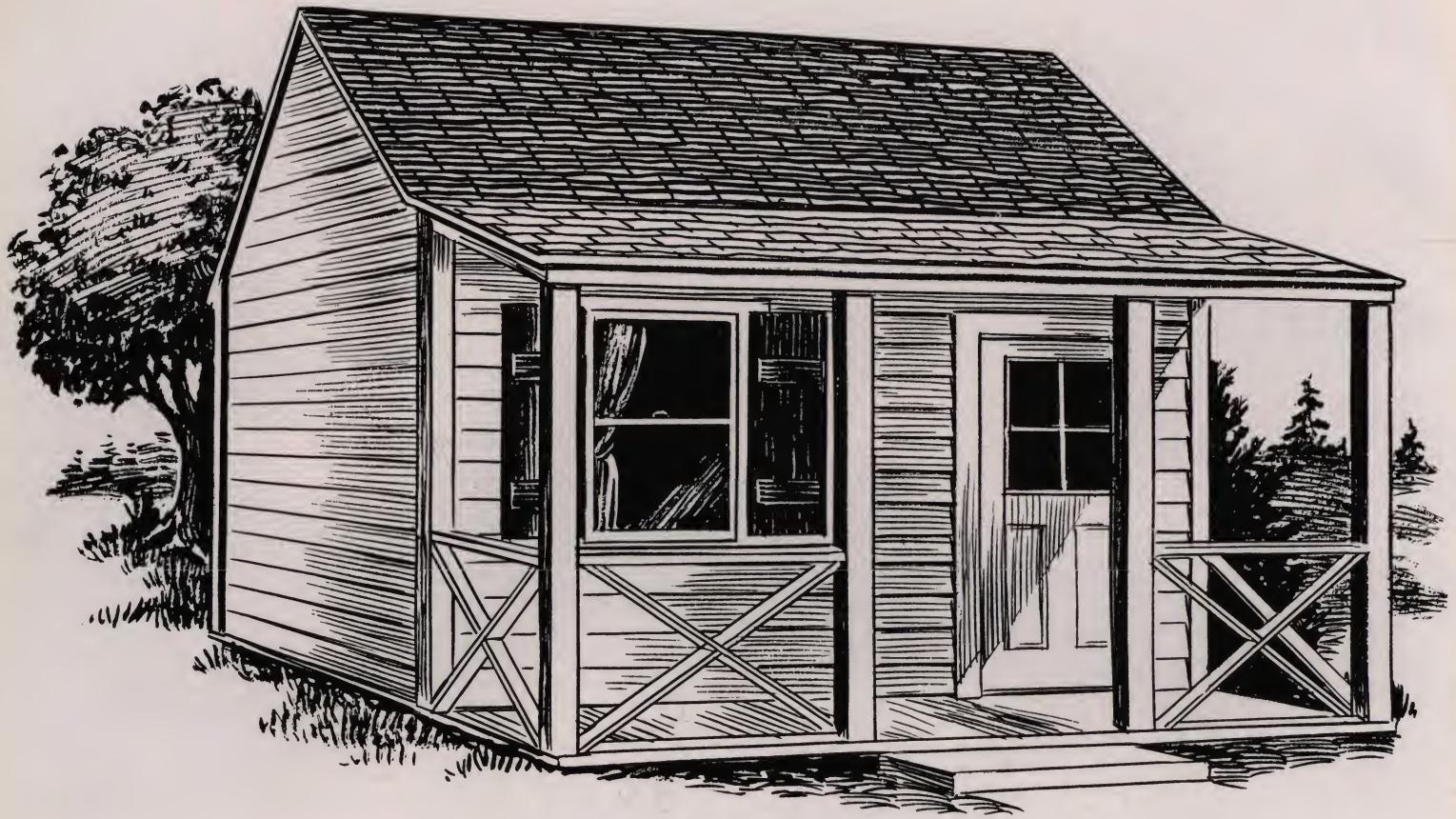




The Woodside

The Woodside is our suggestion of a picturesque log lunch room. Although tiny, it is complete with soda bar, drive-in-counter and two comfortable rest rooms.





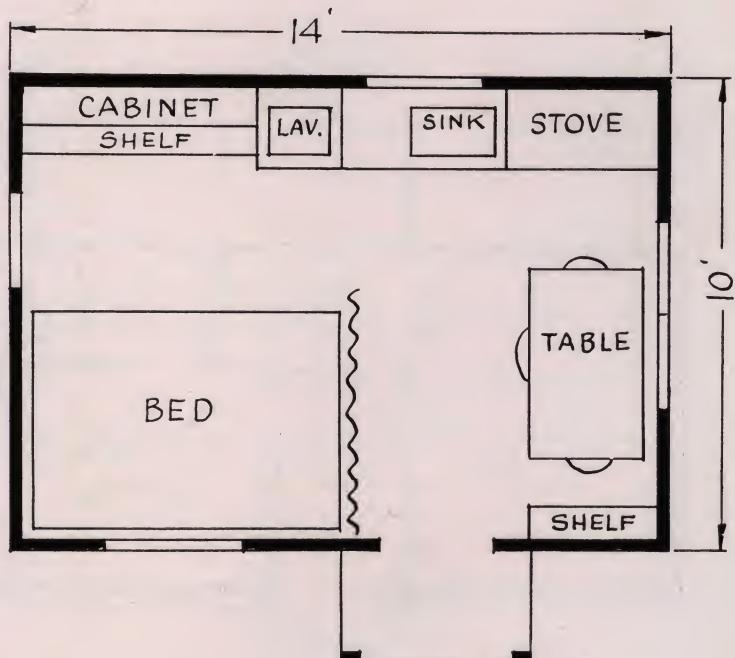
The Alpena

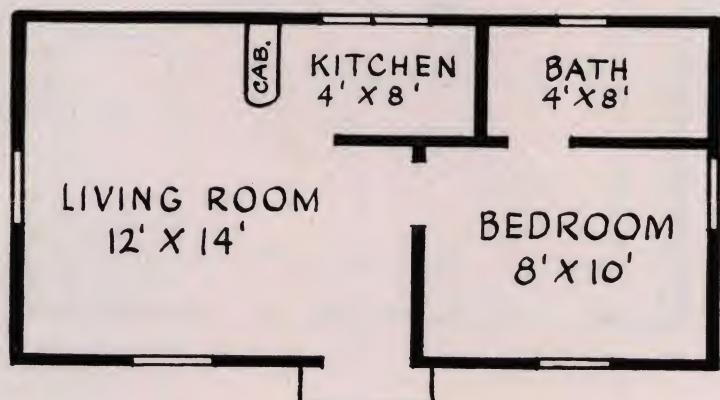
The Alpena is popular in the northern section of Michigan. In recent years many of these cabins have been lined with insulating board.



The Atlanta

Characteristic of thousands of small cabins throughout the country, the Atlanta is compact, inexpensive and may be arranged to suit one's particular desires.





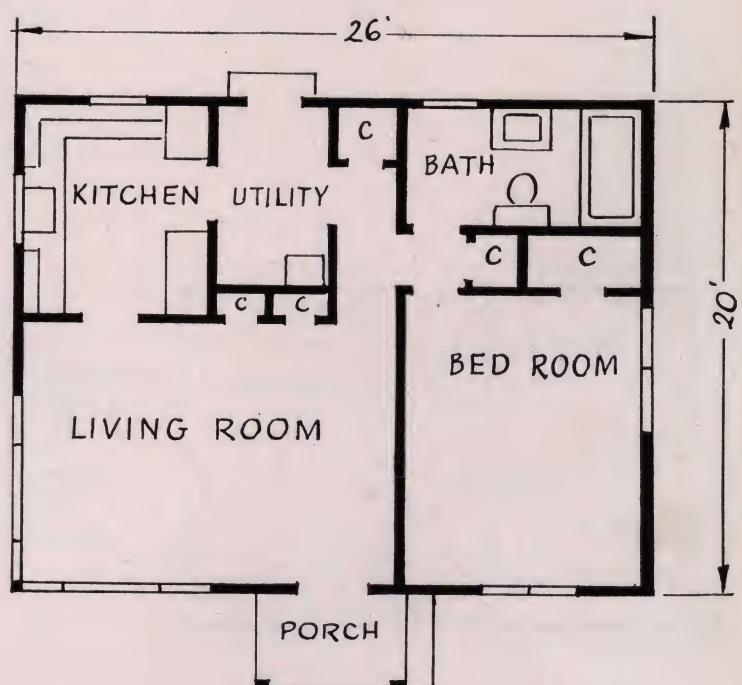
The Nantucket

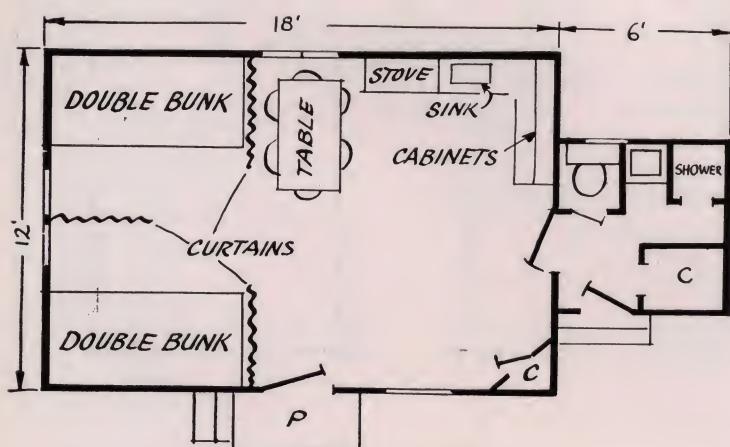
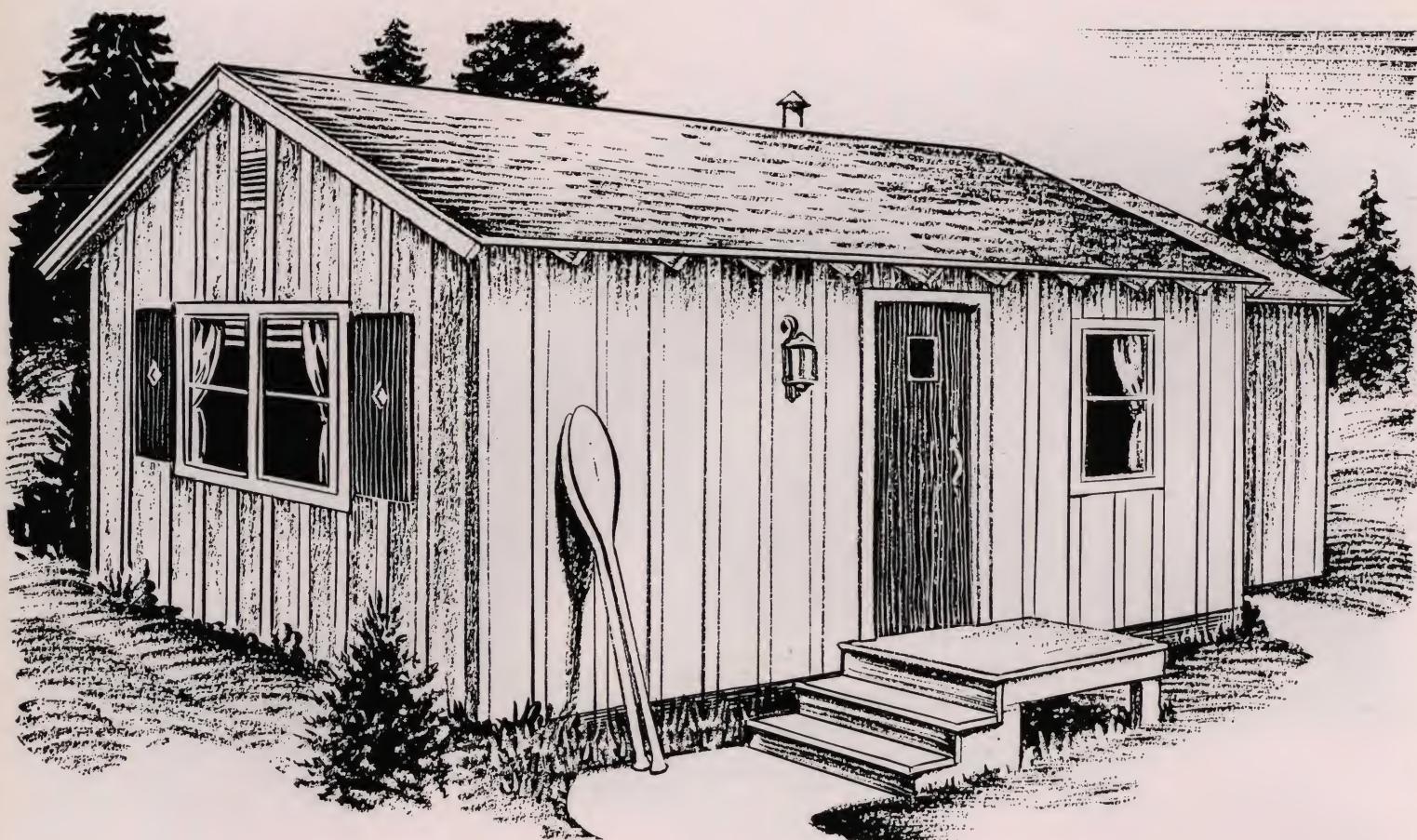
A conventional design that has sufficient space for a family of two. A fireplace may be added in the living room if the climate necessitates.



The Kokomo

This ever popular inland lake design has ample livability.





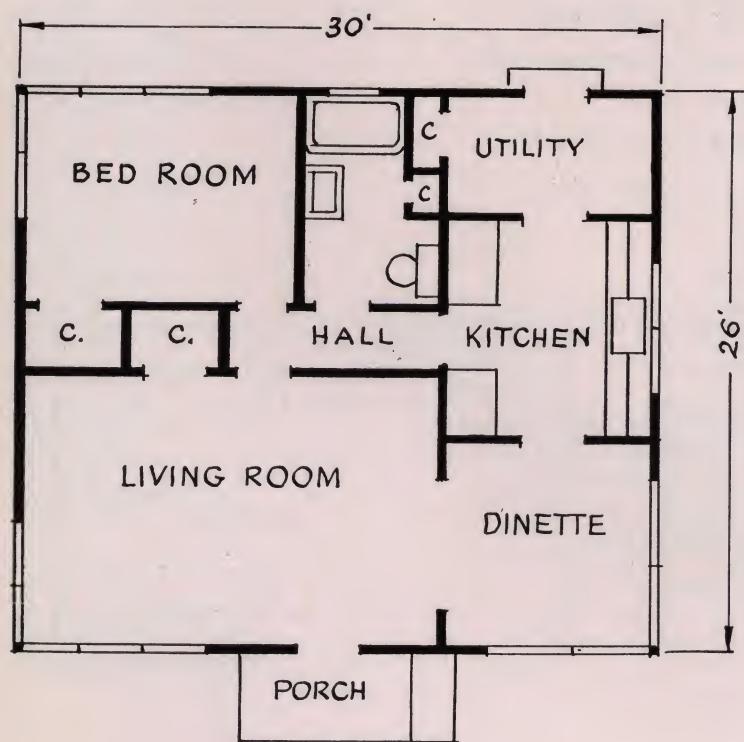
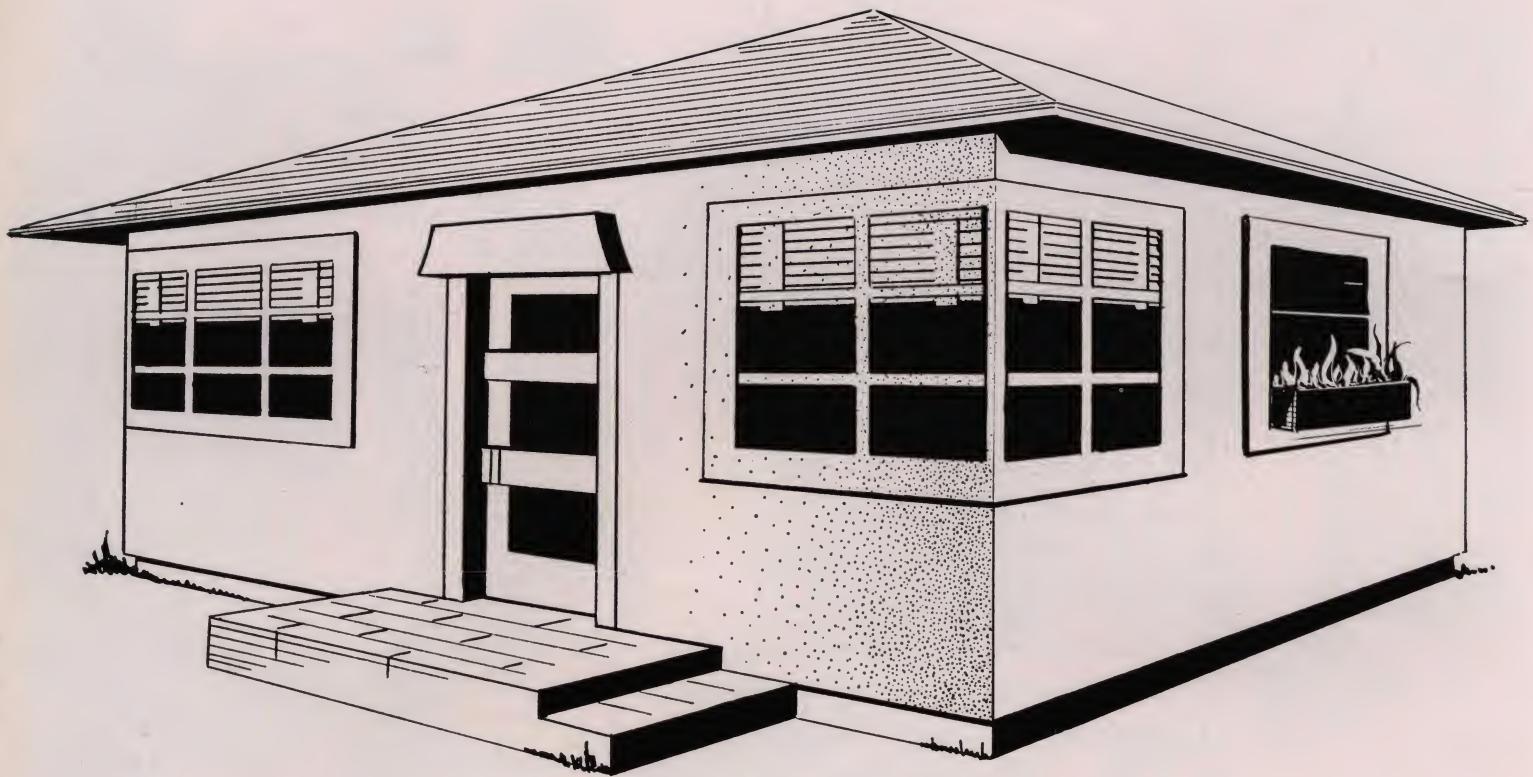
The Tahoe

The Tahoe characterizes thousands of informal cabins used as summer homes, week-end retreats, or hunting and fishing camps. Though small, this design, through the use of two tiers of double bunks will provide sleeping space for eight people. The Tahoe is our choice of a simple and economical cabin built expressly for whole-hearted enjoyment.

The Tahoe

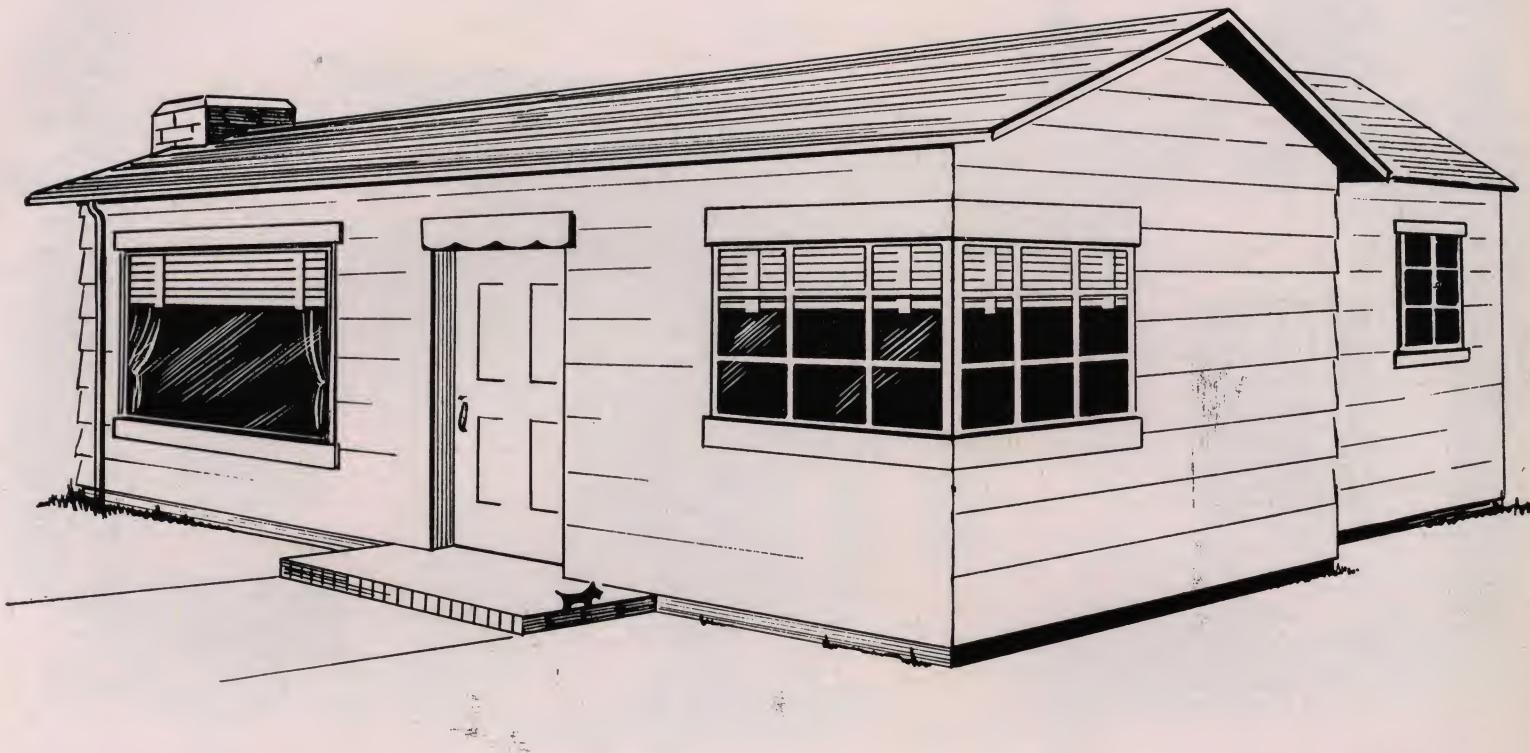
12' x 18' and 6' x 6' Cabin

- 4 pcs. 2" x 6" — 14 S4s Plates
- 7 pcs. 2" x 6" — 10 S4s Plates
- 2 pcs. 2" x 8" — 14 S4s Trimmers
- 1 pc. 2" x 8" — 10 S4s Trimmers
- 31 pcs. 2" x 6" — 10 Joists
- 440 ft. 1" x 4" End Matched Flooring
- 520 ft. lin. 2" x 4" S4s Plates
- 76 pcs. 2" x 4" — 8 S4s Studs
- 15 pcs. 2" x 4" — 14 S4s Ceiling Joists
- 6 pcs. 2" x 4" — 10 S4s Ceiling Joists
- 60 ft. lin. 1" x 4" S4s Ceiling Ties
- 24 pcs. 2" x 4" — 10 S4s Rafters
- 7 pcs. 2" x 4" — 14 S4s Rafters
- 120 ft. lin. 1" x 2" S4s Room trim — Grade 2, white pine
- 148 ft. lin. 1" x 4" S4s Roof trim — Grade 2, white pine
- 600 ft. 1" x 6" S4s Roof trim — Grade 2, white pine
- 1/4 sq. 16" Red Cedar Shingles for starter course on roof
- 6 sqs. 12" x 36" Thick Butt Shingles
- 860 ft. 1" x 12" S4s Side Wall Grade No. 2, white pine
- 800 ft. lin. 1" x 2" S4s Bottens, Grade 2, white pine
 - 1 Door Frame 3' 0" x 6' 8" Oak Sill
 - 1 Door Frame 2' 6" x 6' 8" Oak Sill
- 4 Units Horizontal Gliding Frames and Screens
 - 1 Door 3' 0" x 6' 8" — 1 3/4" — white pine
 - 1 Door 2' 6" x 6' 8" — 1 3/8" — white pine
 - 1 Door 2' 6" x 6' 8" — 1 3/8" — white pine
 - 2 Doors 2' 0" x 6' 8" — 1 3/8" — white pine
- 3 Sets 2' 8" x 6' 8" Door Jambs — yellow pine
- 3 pcs. 4' x 8' Plywood partitions
- 6 ft. Upper Cupboards
- 10 ft. Lower Cupboards



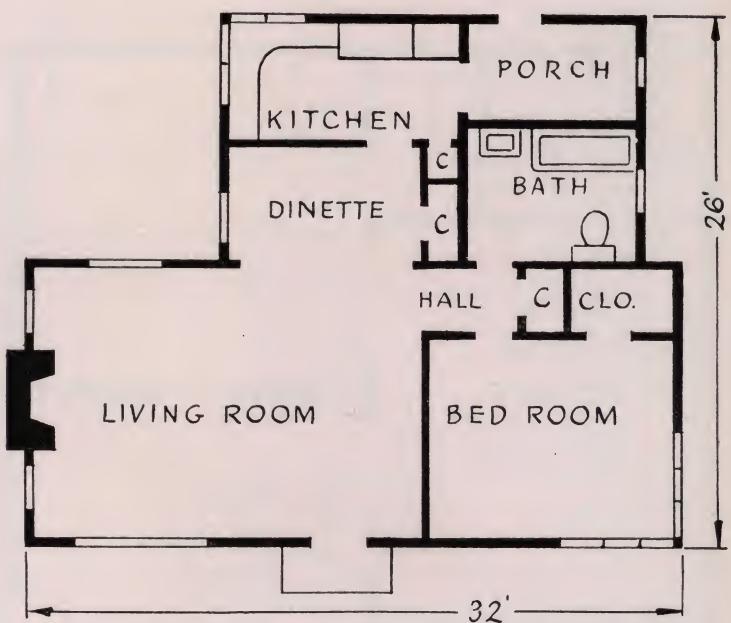
The Phoenix

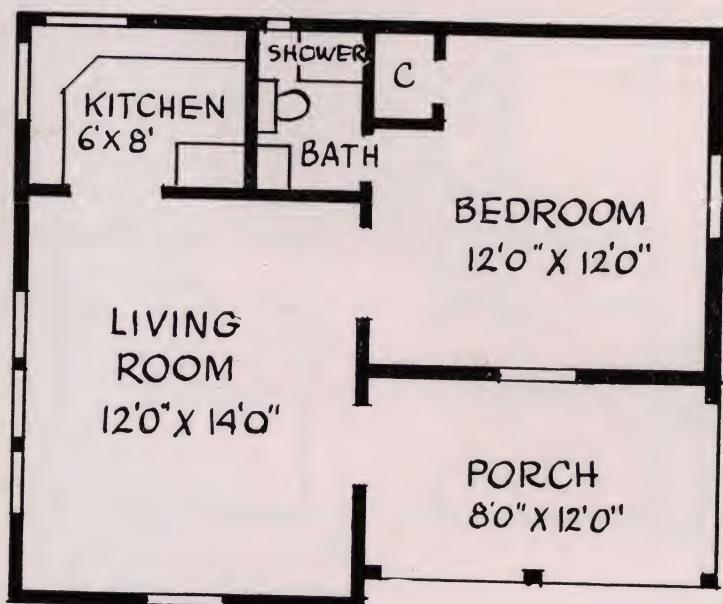
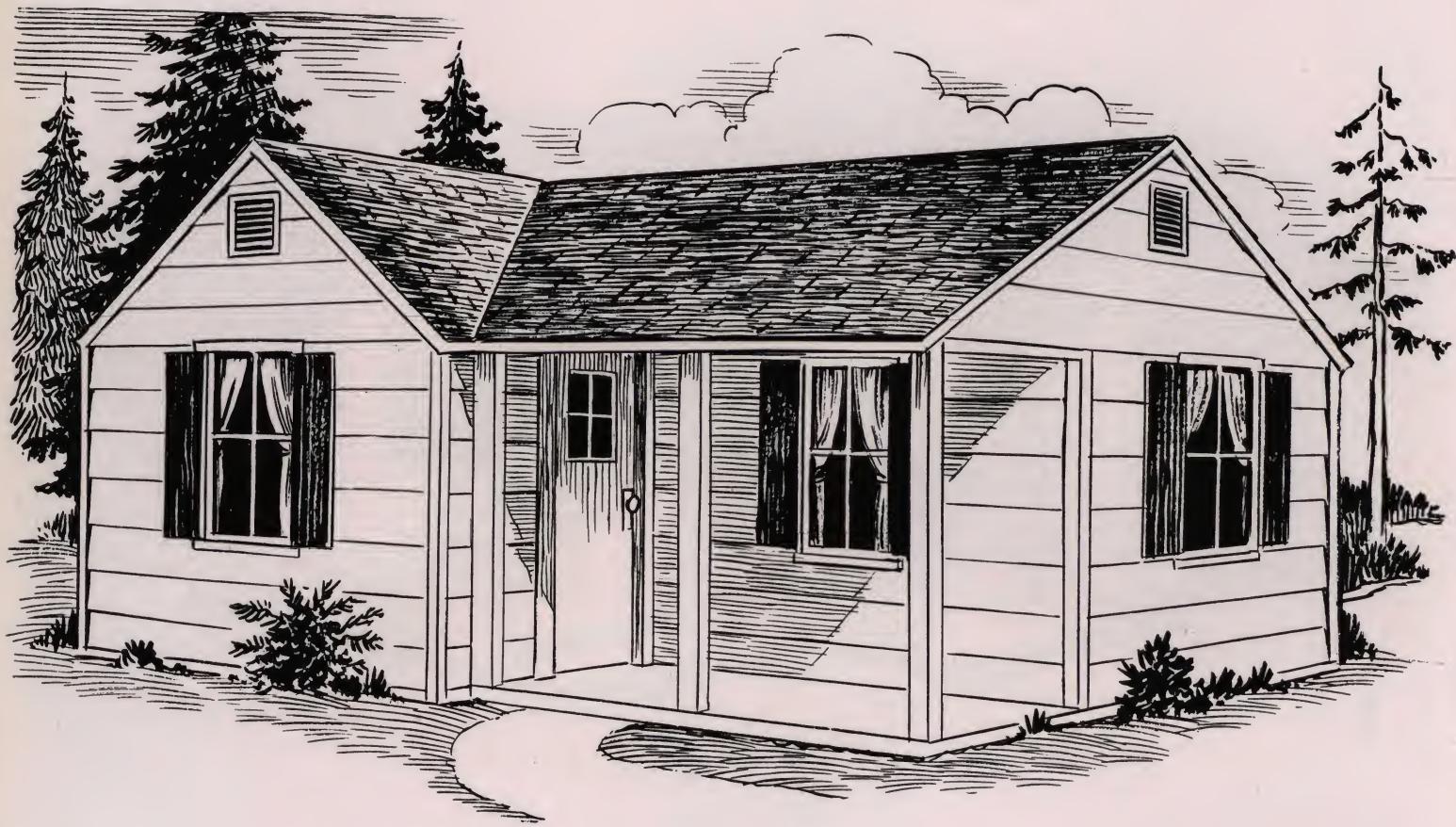
The Phoenix is typical of those popular homes where the winters are cold and the summers warm. Corner windows take full advantage of the summer breeze; the steep pitch roof sheds snow in the winter.



The Dowagiac

The Dowagiac is typical of the modern cottages built on the shores of Stone Lake. It is planned for economy of construction without sacrificing appearance or convenience.





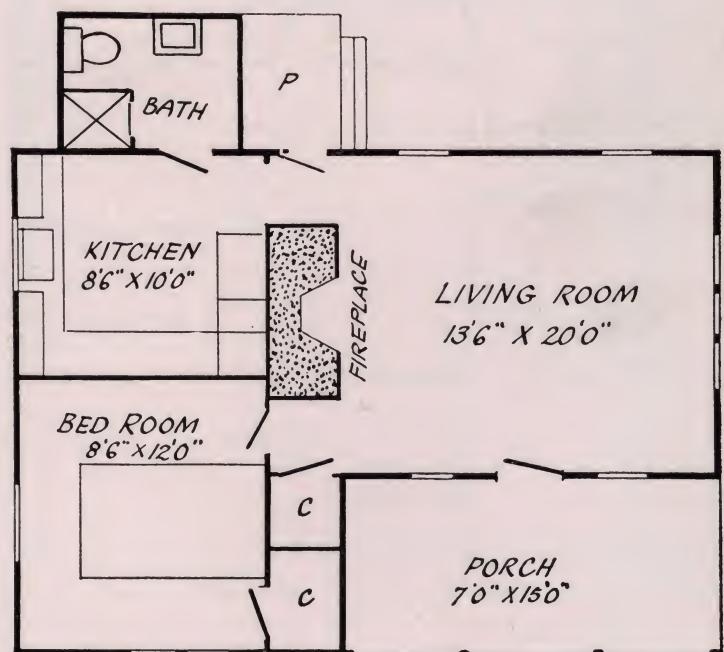
The Kalkaska

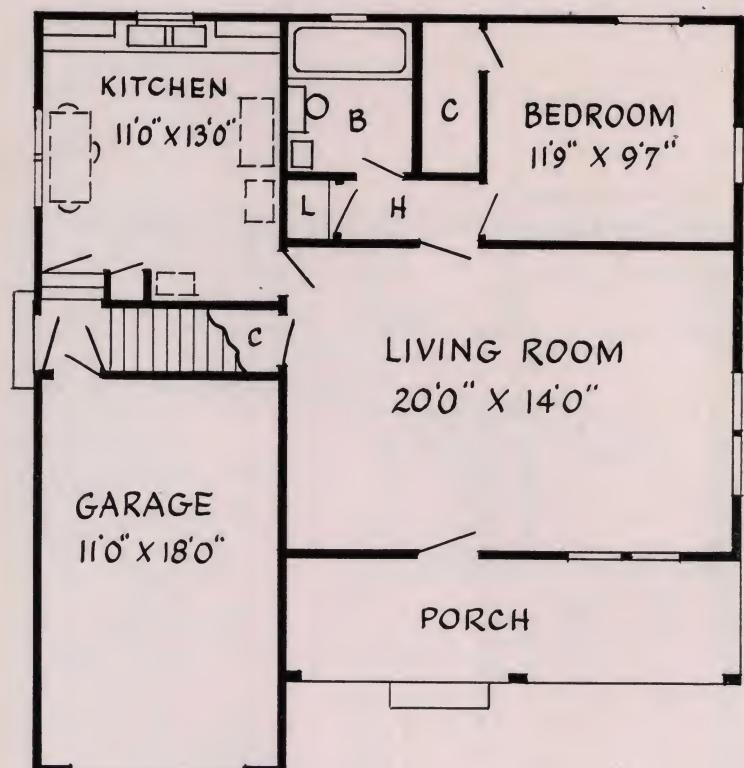
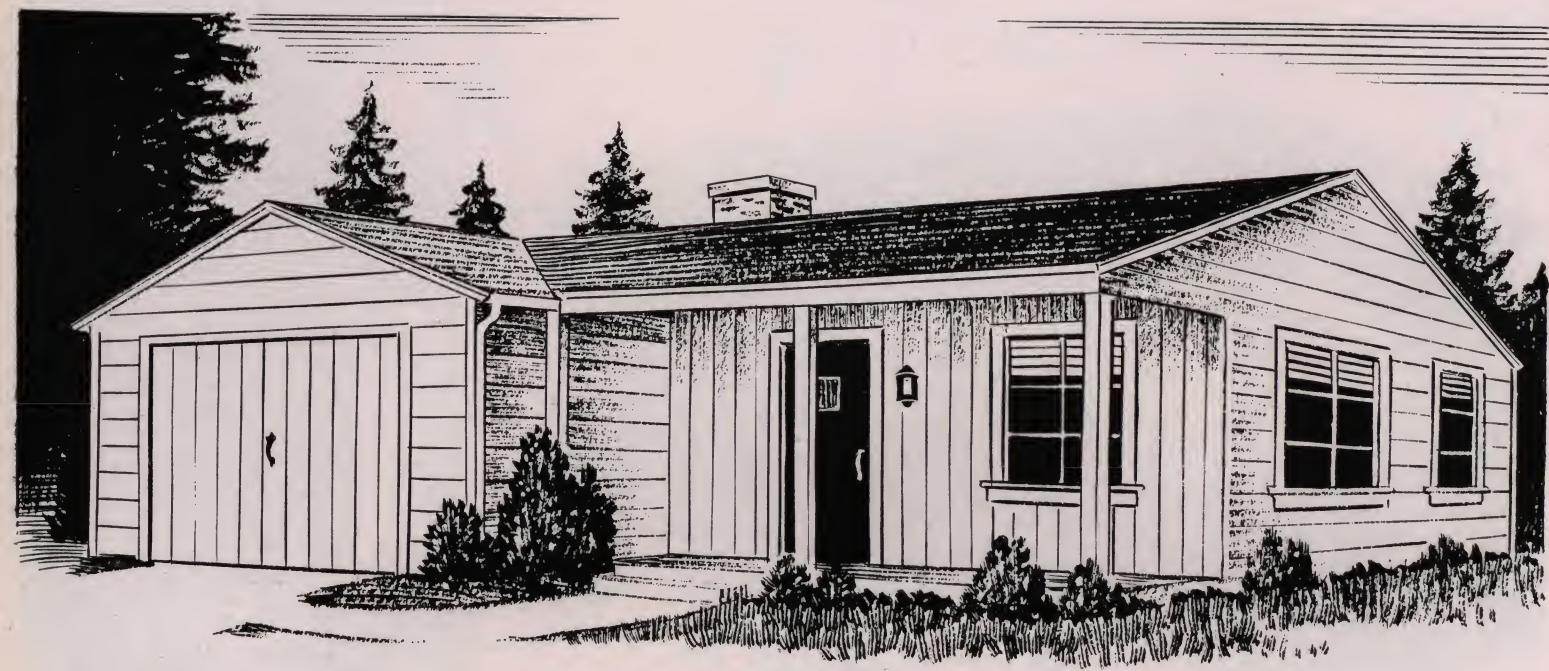
This minimum design of frame construction is most popular as a week-end cottage.



The Michiana

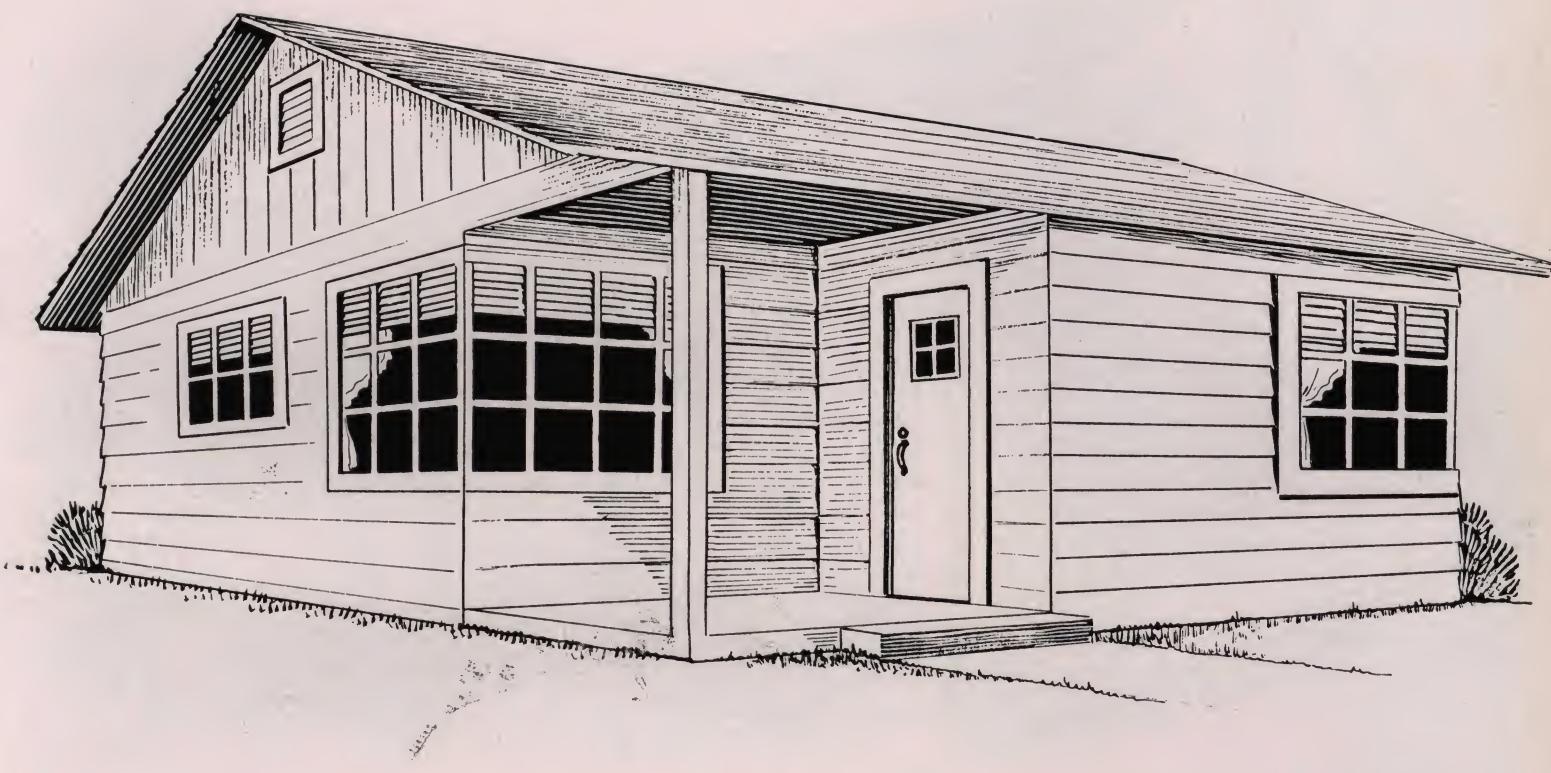
Comfort and convenience have been combined in modern design that makes the Michiana a charming one-bedroom cottage.





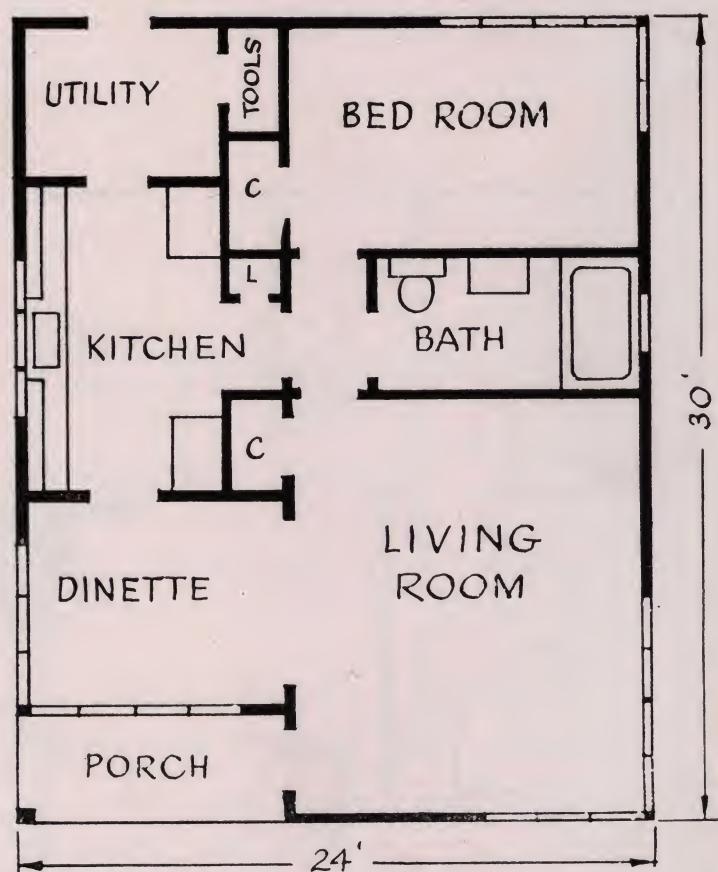
The Fond du Lac

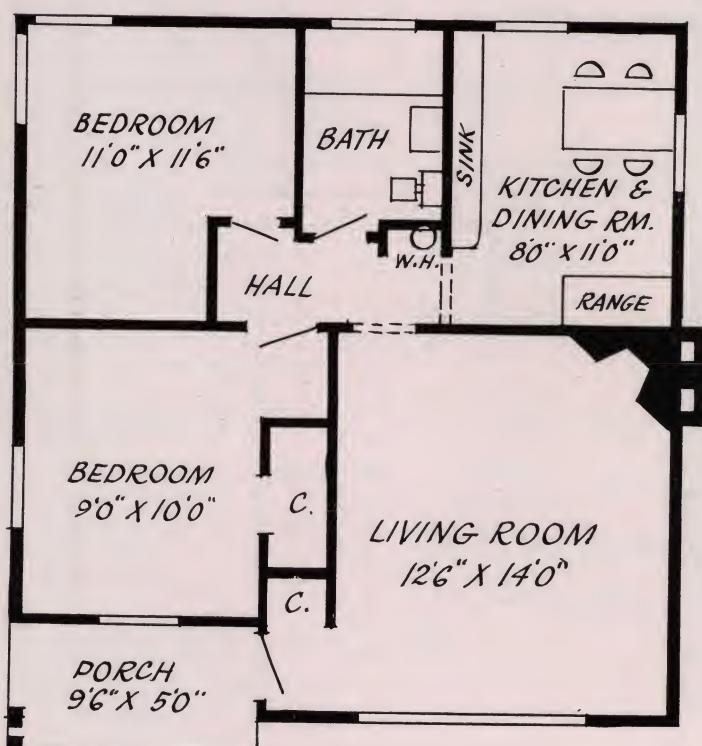
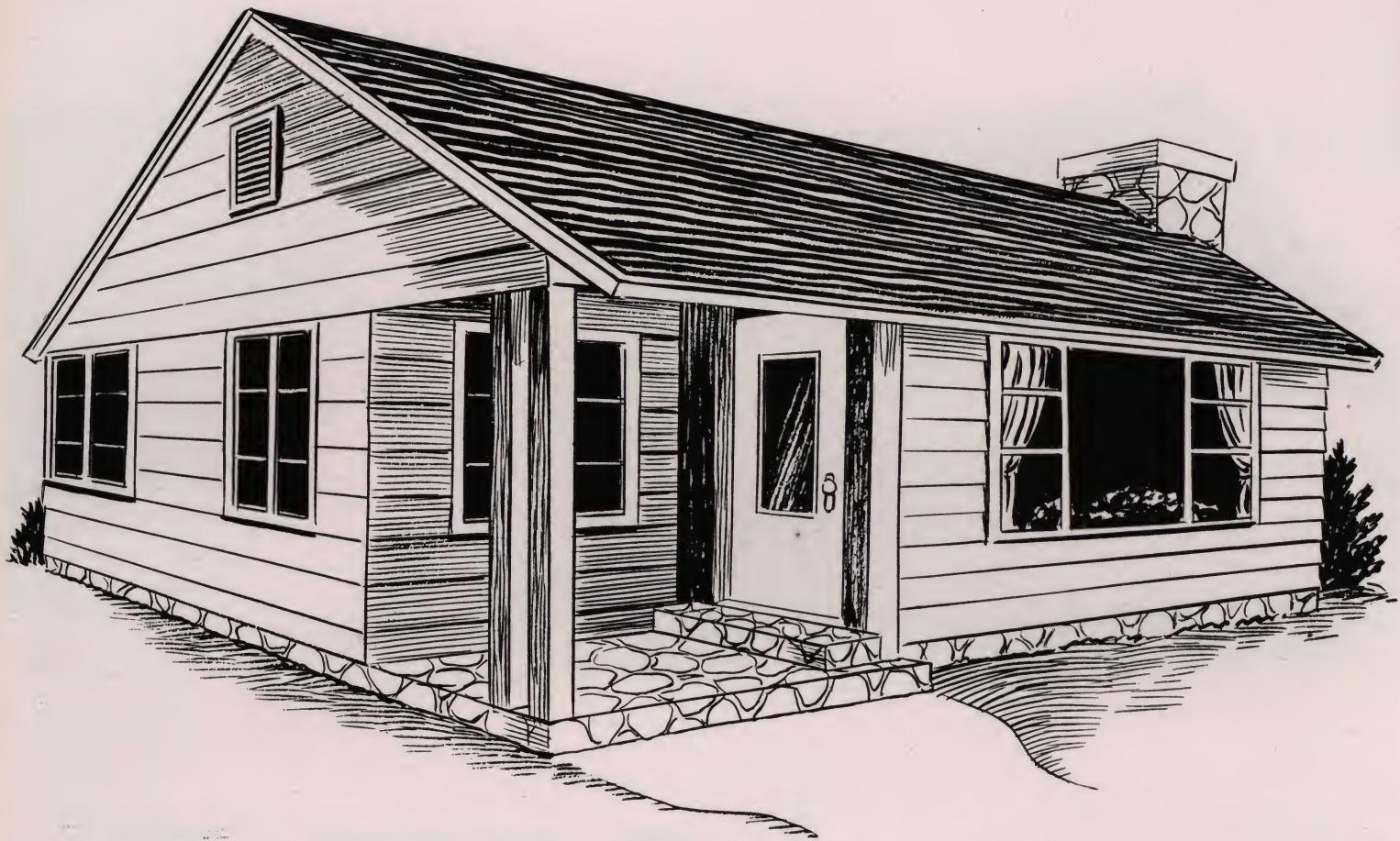
The Fond du Lac is typical of the colorful lakeshore cottages in Wisconsin. It is spacious for a family of two, and the large living room is often used with a double daybed to take care of week-end guests. The attached garage is only one of its many convenient features.



The Saugatuck

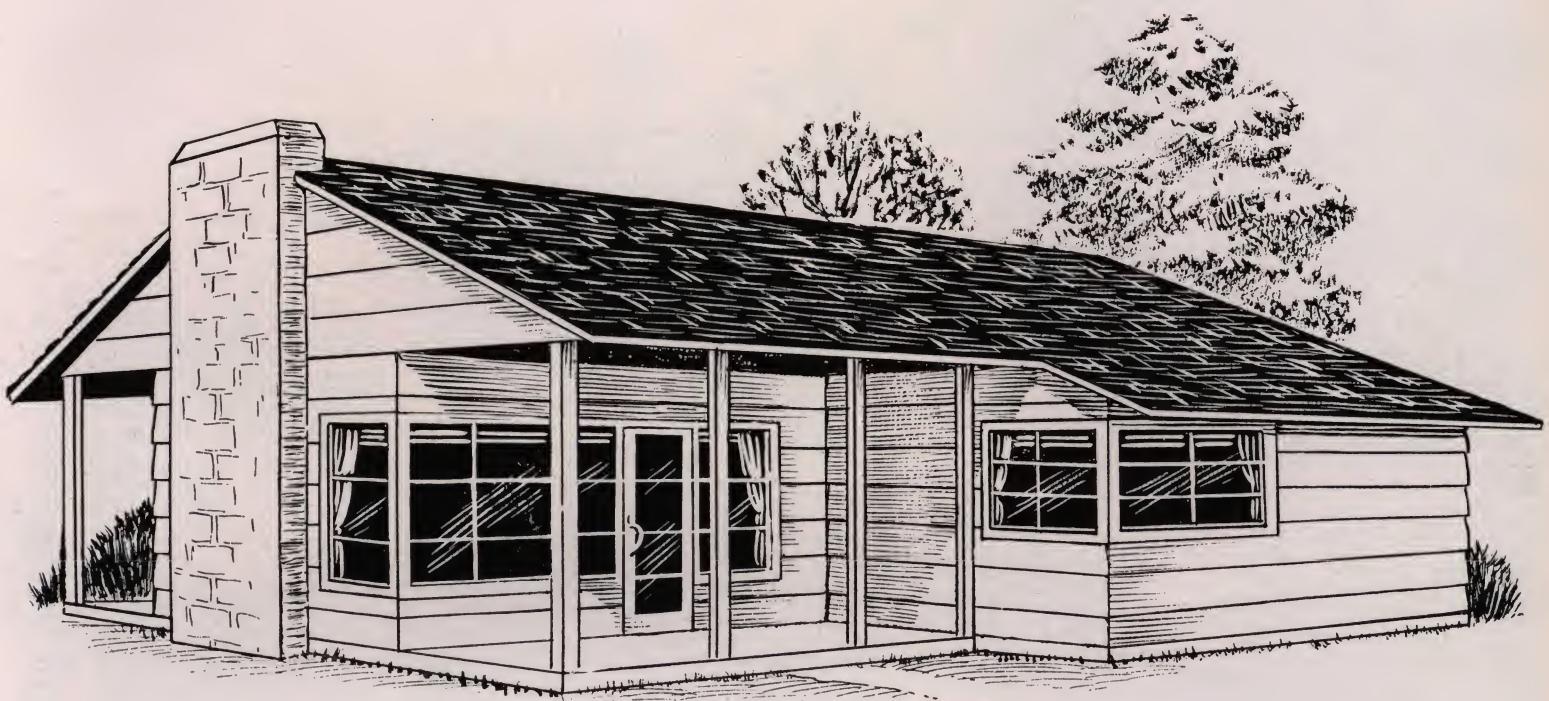
The Saugatuck is a modern home with well chosen architectural details.





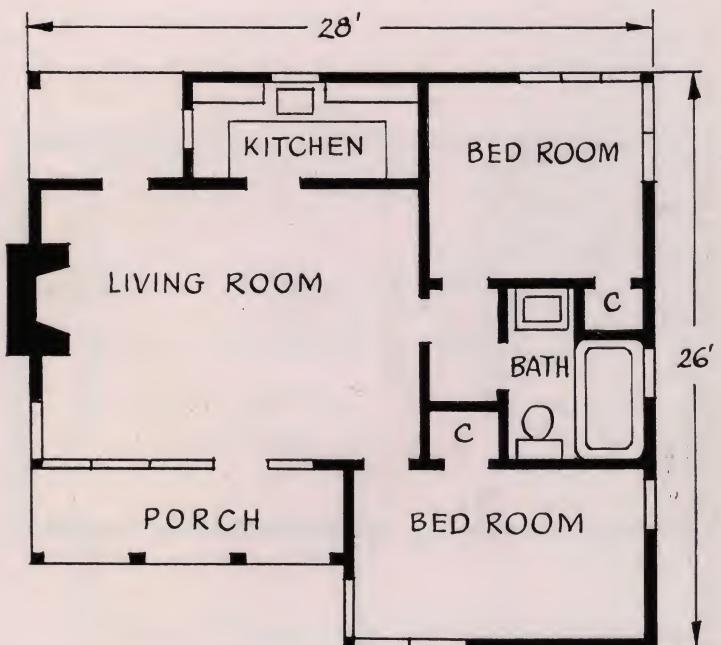
The Choptank

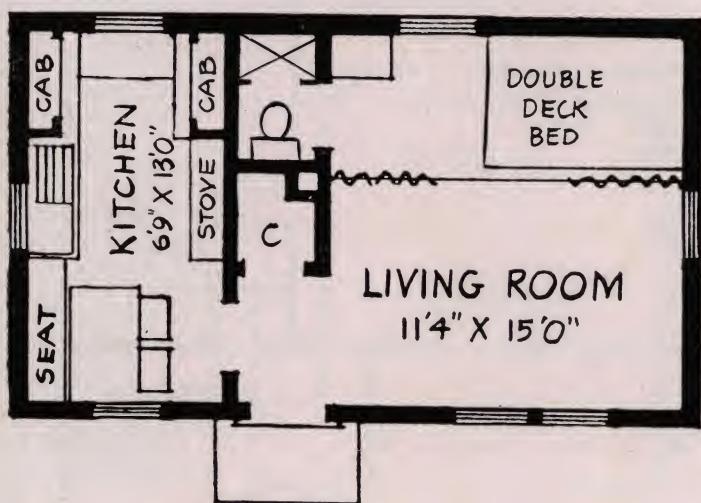
Along the Maryland Shores you will find many examples of the Choptank cottage, with its spacious living room and modern picturesque windows.



The Norfolk

Following the horizontal lines of the siding, the small window panes produce a charming modernistic atmosphere. The back porch may be made into a patio, lanai or dining room as your individual tastes dictate.





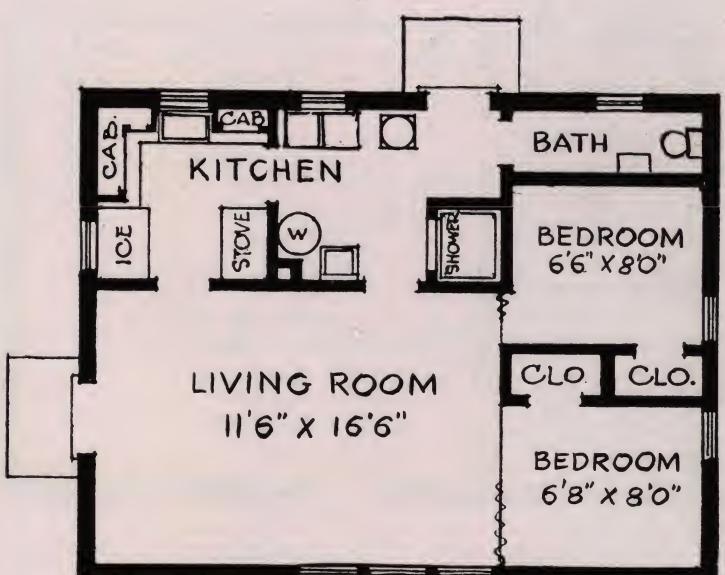
The Narragansett

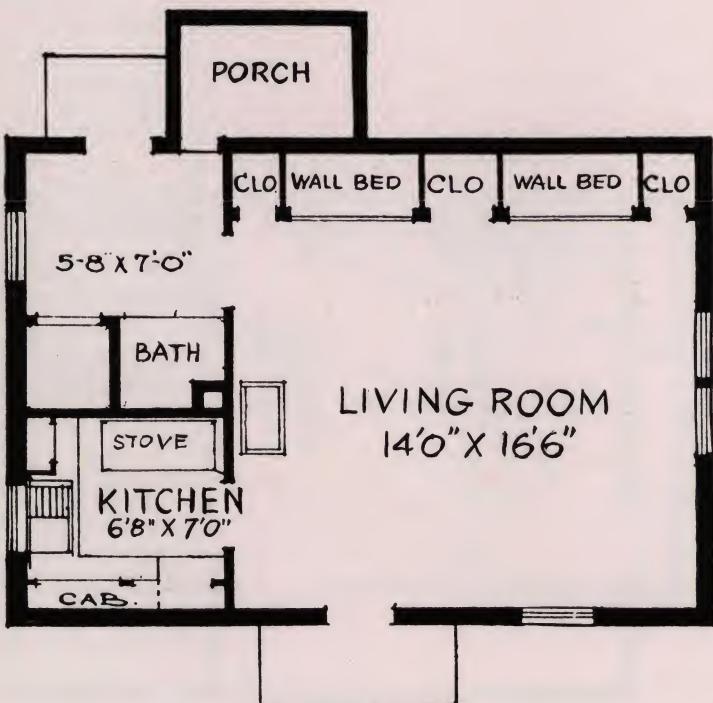
This modern Cape Cod plan is roomy and convenient. The large kitchen and breakfast nook makes a most attractive cottage.



The Colorado

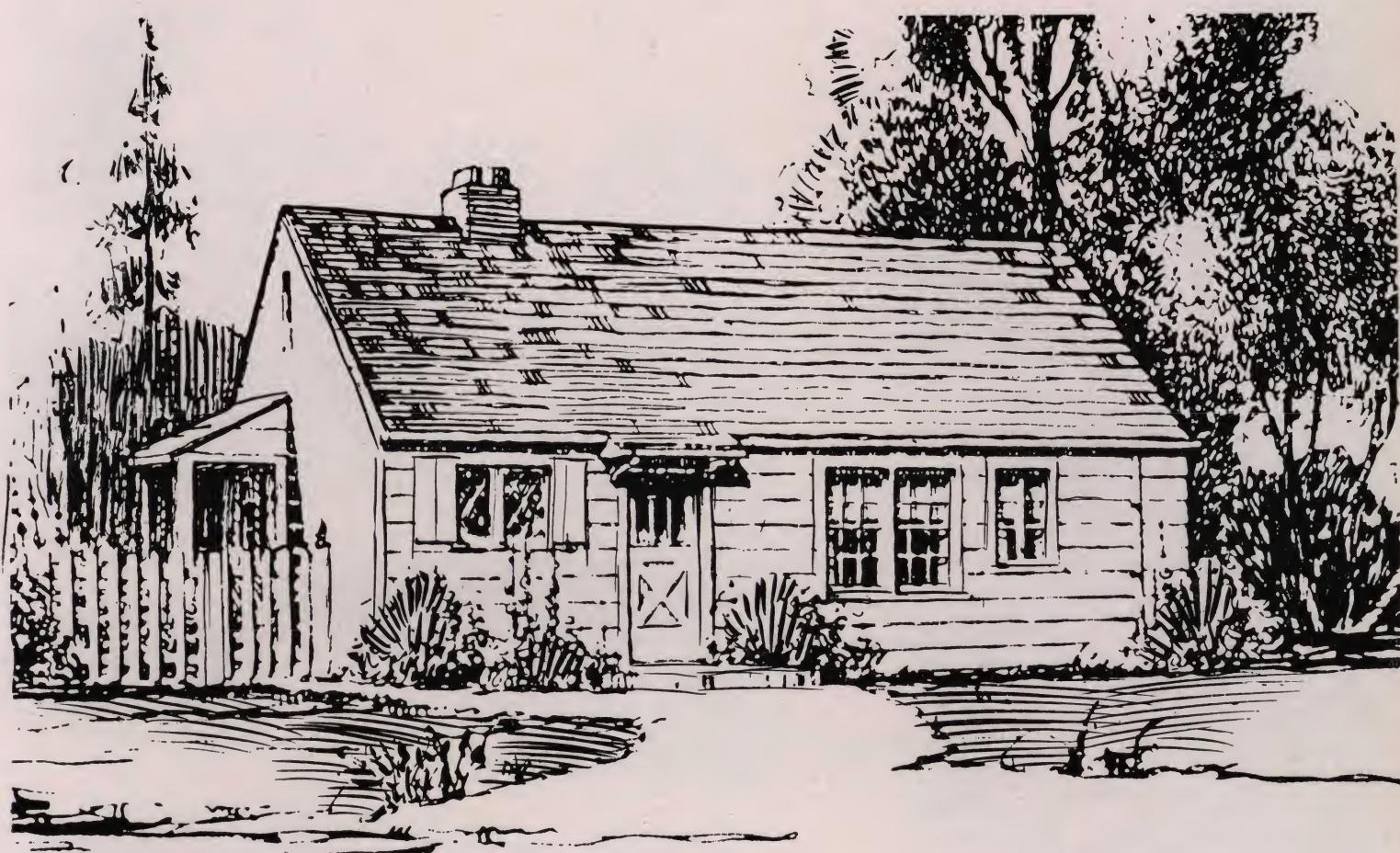
The Colorado should be given careful consideration. Its exterior and interior arrangement represents excellent value for the relatively small investment.





The Las Vegas

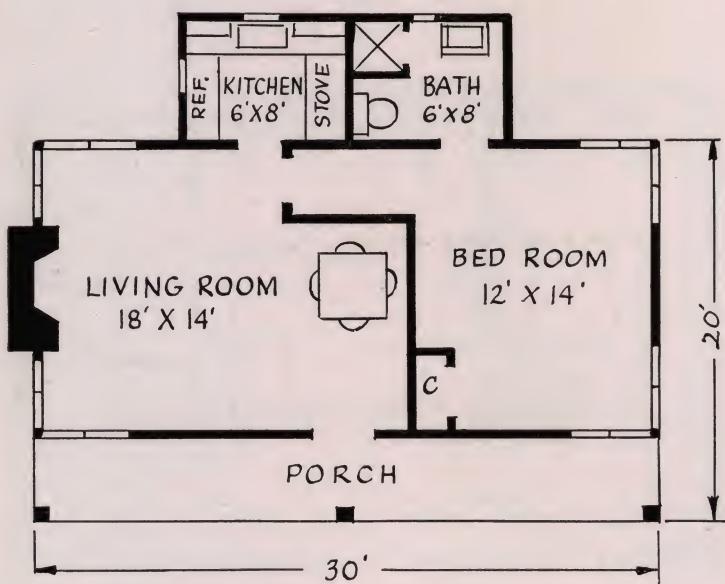
The attractive exterior of the Las Vegas with the snow angle roof lends itself to construction in the higher altitudes. Although the beds and closets are part of the living room, they are easily hidden with sliding panels.



The Meridian

This traditional New Englander offers every comfort for a family of two. Stressing simplicity in arrangement, this cottage makes a particularly attractive vacation home.





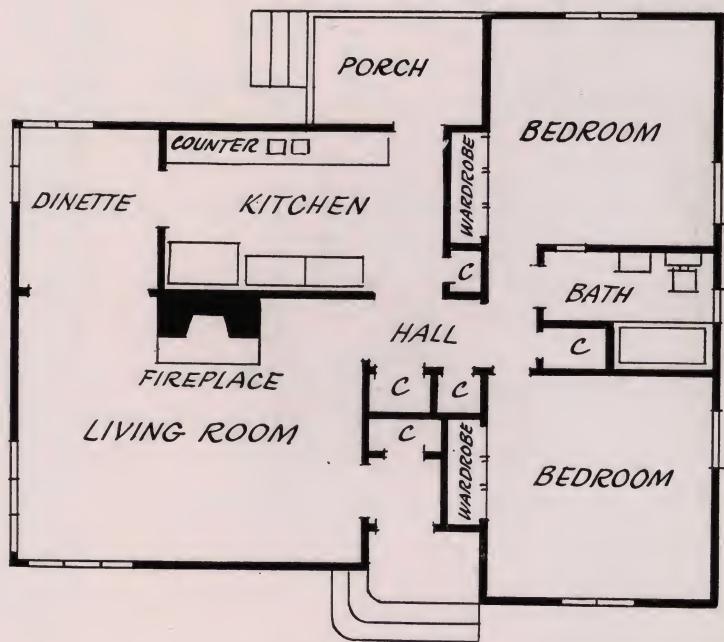
The Woodbeck

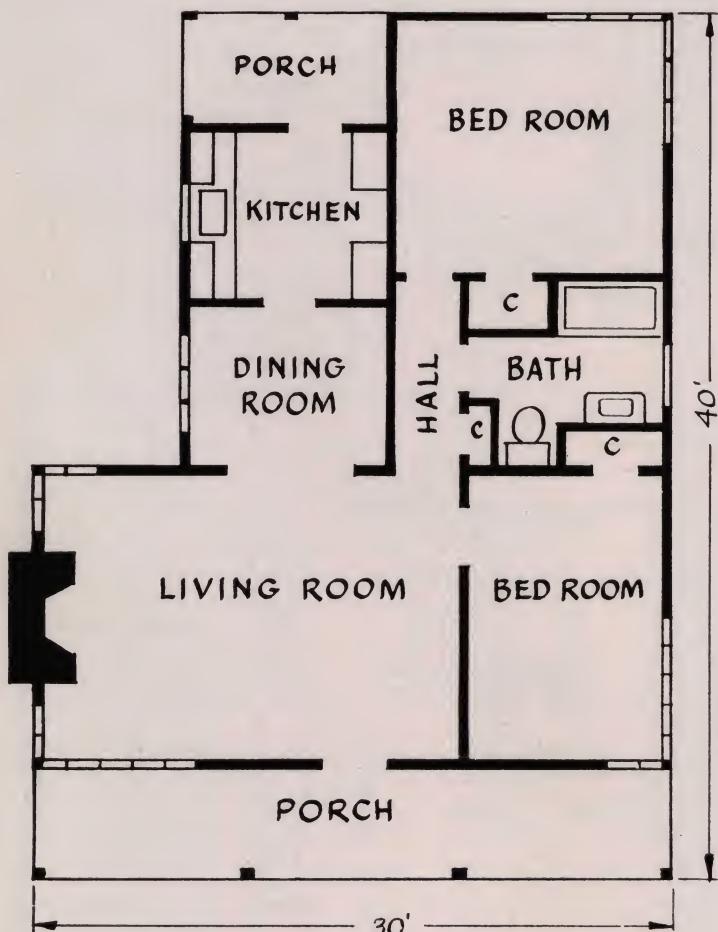
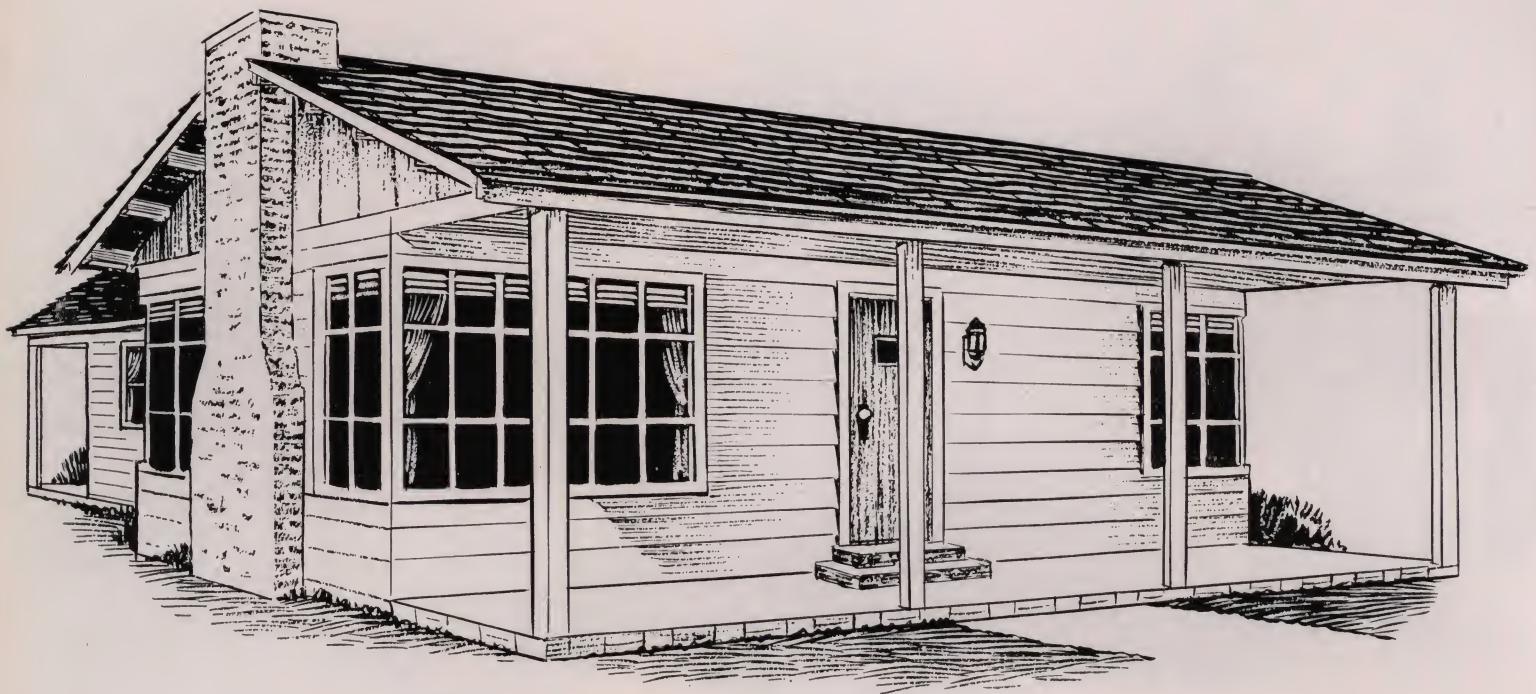
The Woodbeck characterizes large overhanging eaves so suitable for a cottage in any locality. Another pertinent feature of this design is the compact apartment kitchen.



The Mahopac

The Mahopac is characteristic of the numerous homes located within an hour and a half by motor from New York City. The galley kitchen with its adjoining dinette is a labor saving convenience in this two bedroom cottage.





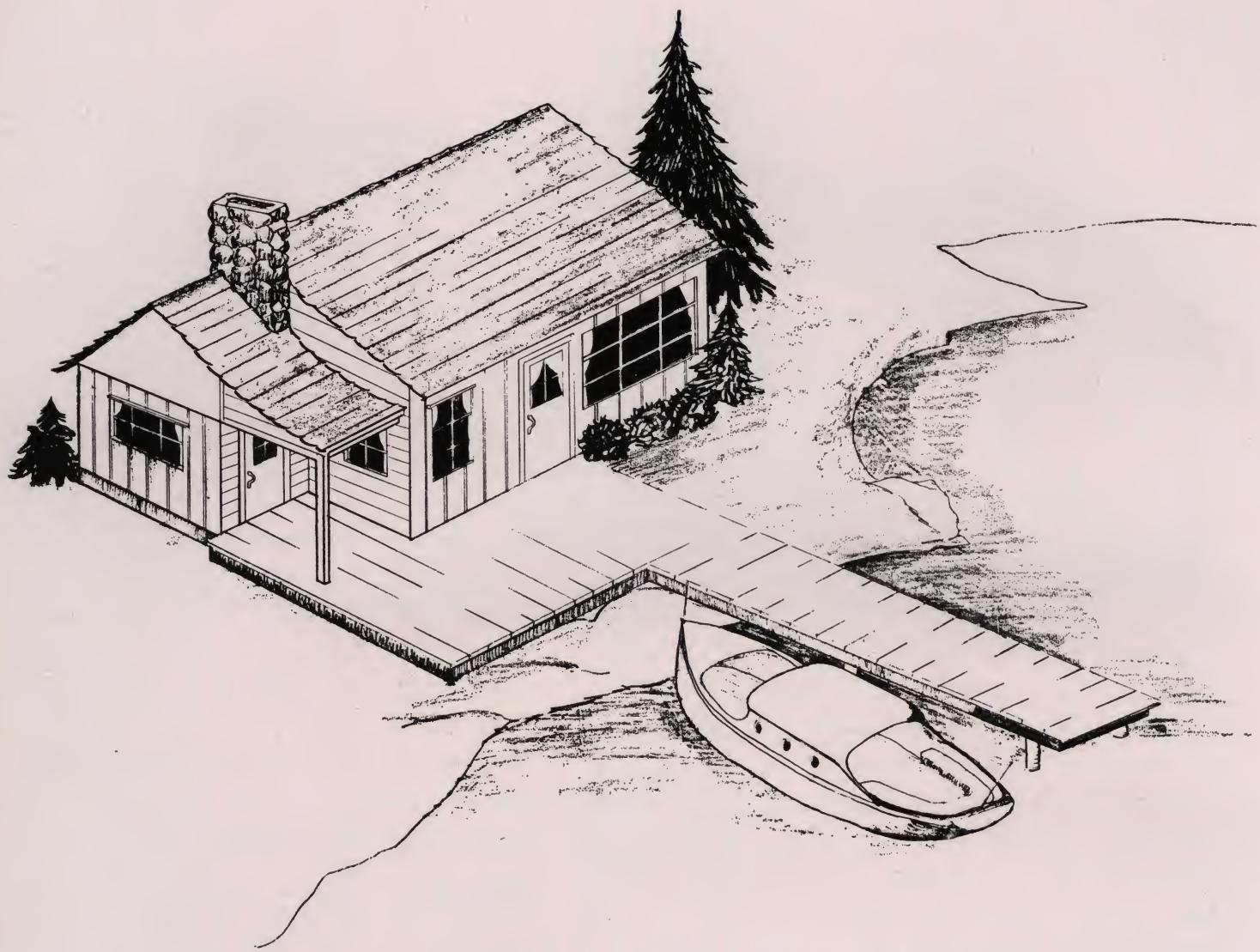
The San Rafael

The San Rafael may be called the "all American" home. Its simple compact plan is typical architecture of the United States. Of particular interest, are the wide overhanging eaves that are advantageous in either a warm or cold locality and the many large windows that are an integral part of every American home. This design is easily modified to suit individual preferences in room arrangement.

The San Rafael

30 Foot by 40 Foot Cottage

188 ft. lin. 2" x 6" Wall Plates	104 ft. lin. 3/4" x 1/8" Cove — Grade C, White Pine
1 pc. 2" x 8"—8 S4s Joists, Box Sills and Headers	10 pcs. 4' 0" x 6' 0" — 1/2" Exterior Plywood, Fir
21 pcs. 2" x 8"—10 S4s Joists, Box Sills and Headers	1 door 3' 0" x 6' 8"—1 3/4" Flush 1 Light Glazed
20 pcs. 2" x 8"—12 S4s Joists, Box Sills and Headers	1 door frame 3' 0" x 6' 8"
26 pcs. 2" x 8"—14 S4s Joists, Box Sills and Headers	5 Sets Dirks Stream Line Trim — yellow pine
1 pc. 2" x 8"—16 S4s Joists, Box Sills and Headers	1 Screen Door 3' 0" x 6' 8"
6 pcs. 2" x 6"—8 S4s Window Headers	1 door 2' 6" x 6' 8" — Glazed
11 pcs. 2" x 6"—10 S4s Ceiling Joists	1 Screen Door 2' 6" x 6' 8" — 1 1/8"
16 pcs. 2" x 6"—12 S4s Ceiling Joists	9 pcs. Anderson Horizontal Gliding Units and Screens
24 pcs. 2" x 6"—14 S4s Ceiling Joists	2 Windows 30" x 16" x 16" 4 light glazed white pine
6 pcs. 4" x 4"—8 S4s Porch Posts	1 Window Frame 30" x 16" x 16"
250 pcs. 2" x 4"—8 S4s Studs	1 Screen 30" x 16" x 16"
950 ft. lin. 2" x 4"—8 S4s Plates and Gable	1 Set Dirks Stream Line Window Trim — yellow pine
8 pcs. 2" x 8"—10 Porch Headers	4 Doors 2' 0" x 6' 8" — 1 3/8" — 6 Pane — white pine
2 pcs. 2" x 8"—6 Porch Headers	1 Set Jambs and Stops each
4 pcs. 2" x 8"—16 Porch Headers	4 Sets Dirks Stream Line Trim
12 pcs. 2" x 4"—12 Rafters	3 Doors 2' 6" x 6' 8" 1 3/8" — 6 Panel
42 pcs. 2" x 4"—14 Rafters	1 Set Jambs and Stops each
1500 ft. 1" x 8" Sheathing for sides	330 ft. lin. 9/16" x 3 1/4" Molding Base — yellow pine
1500 ft. 1" x 6" Sheathing for roof	330 ft. lin. 5/16" x 3 1/4" Base Shoe — yellow pine
1500 ft. 3/4" x 8" Siding, Grade A Red Cedar	360 ft. lin. 3/4" x 1/8" Cove — white pine
4 Rolls 15 lb. Asphalt Felt	750 sq. ft. 4' 0" 1/4" Fir Plywood Ceiling
1055 ft. 1" x 4" Flooring End Match, Grade B, yellow pine	2500 sq. ft. 4' 8" x 8' 0" 1/4" Fir Plywood for outside walls
15 sqs. 12" x 36" Thick Butt Shingles	1120 ft. lin. 1/4" x 1 3/4" Lattice, Grade C, white pine
1 Roll 90 lb. Slatekote Roofing or equal	60 ft. lin. 5/8" x 2 1/2" Chair Rail — white pine
1/2 sq. 12" x 36" Red Cedar Shingles for starter course on roof	1 Cupboard 8' 0" x 8' 5" Built Well Units, upper and lower
4 Rolls 15 lb. Asphalt Felt	1 pc. 26" x 96" 3/4" Plywood Top
150 ft. 1" x 10" Vertical Siding, Grade D, white pine	30 ft. lin. 2 x 4's — Fir
480 ft. 3/4" x 3 1/4" Ceiling for the Cornice	50 ft. lin. 3/4" Molding — white pine
174 ft. lin. 1" x 2" S4s Cornice — white pine	1 Medicine Cabinet — Ven. Mirror
100 ft. lin. 1" x 4" S4s Cornice — white pine	
220 ft. lin. 1" x 6" S4s Cornice — white pine	
140 ft. lin. 1" x 8" S4s Cornice — white pine	
160 ft. lin. 3/4" x 1 3/4" Bed Molding, Grade C, white pine for trim under Cornice	



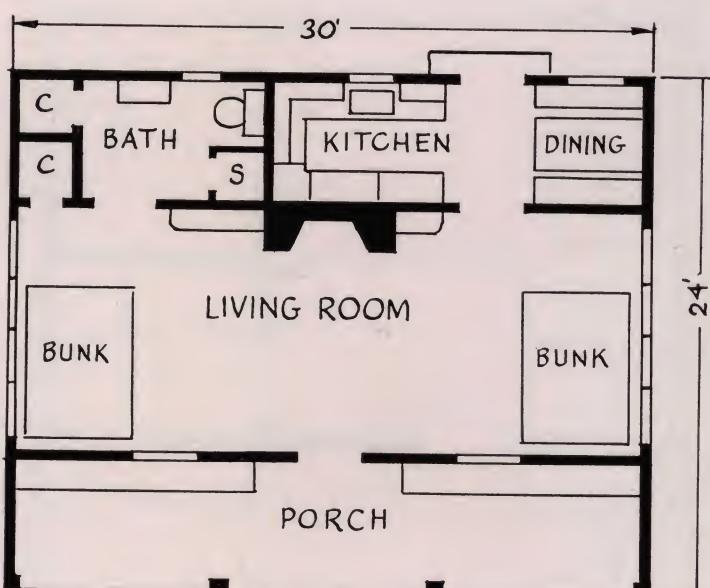
The Winnepesaukee

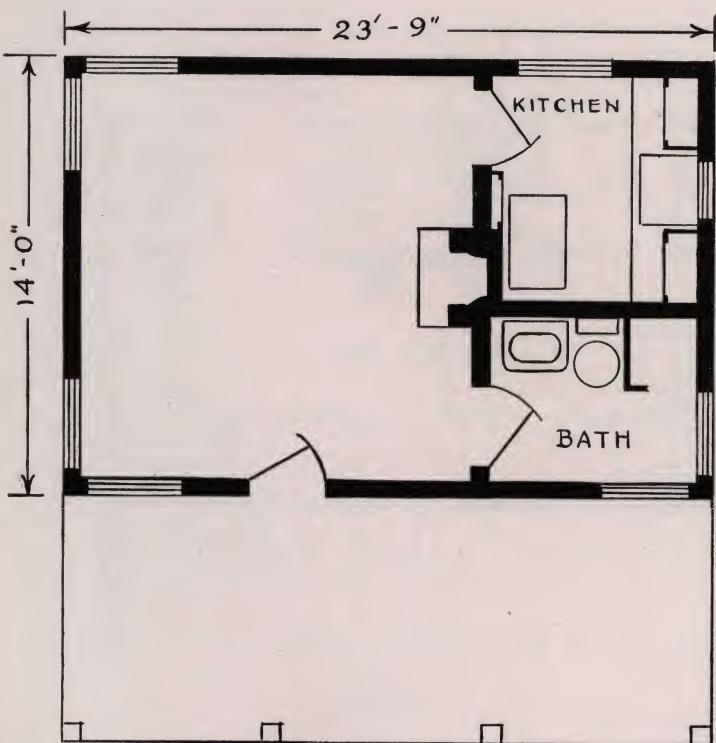
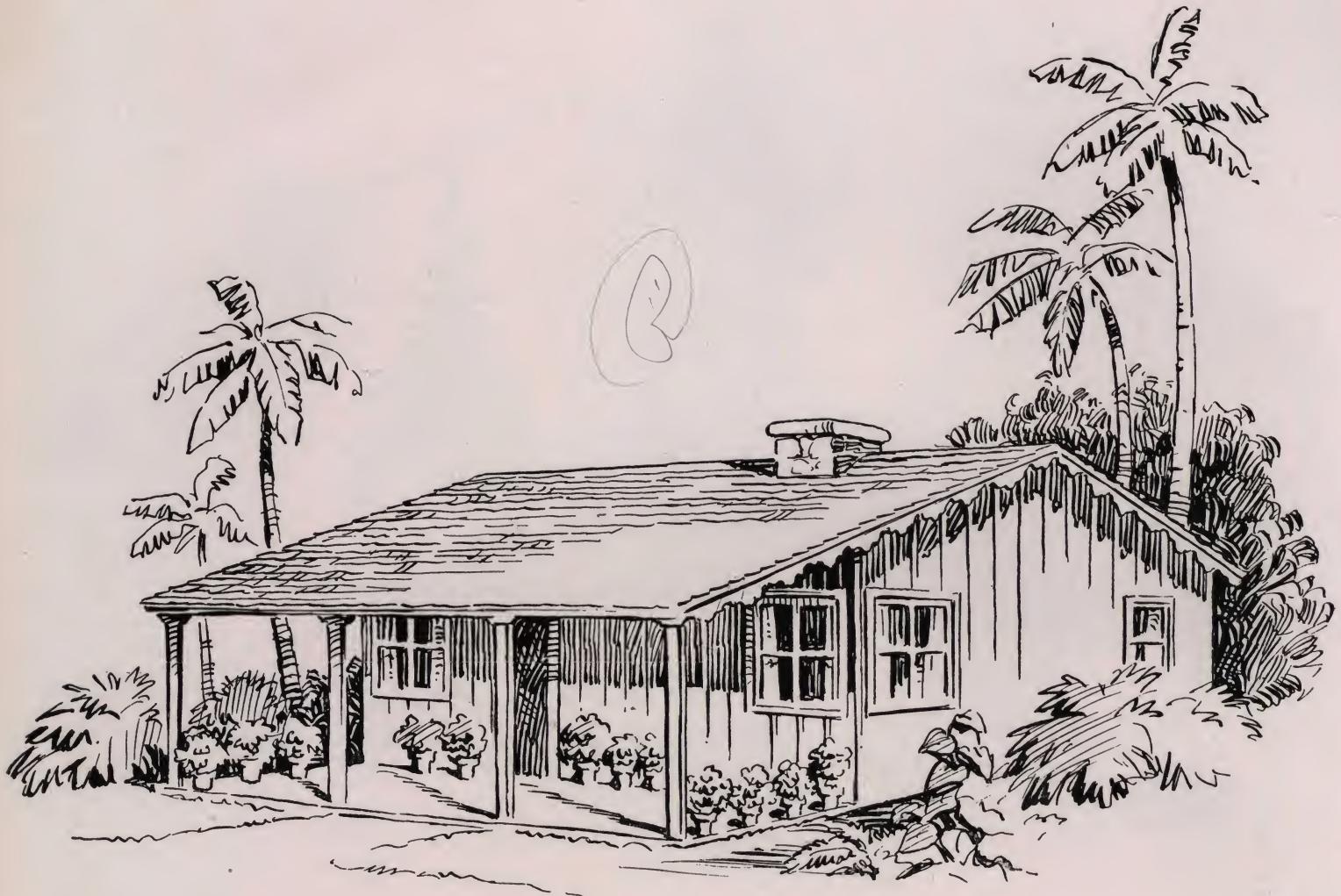
A week-end retreat ideally suited for the lake region of Vermont. Built primarily for easy living, it has all the conveniences for same.



The Moosehead

This compact cabin designed for the snow country, is excellent for four congenial hunting or fishing partners.





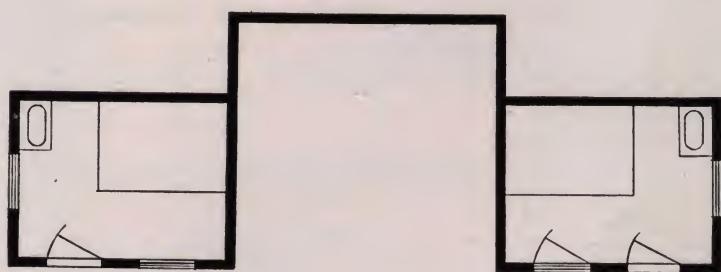
The San Diego

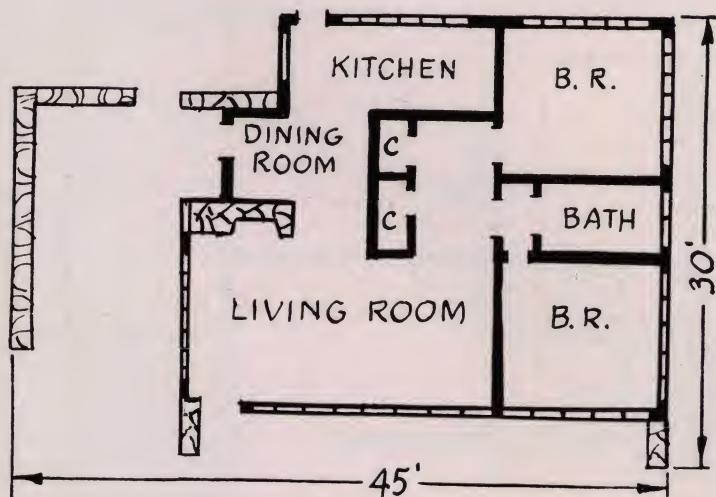
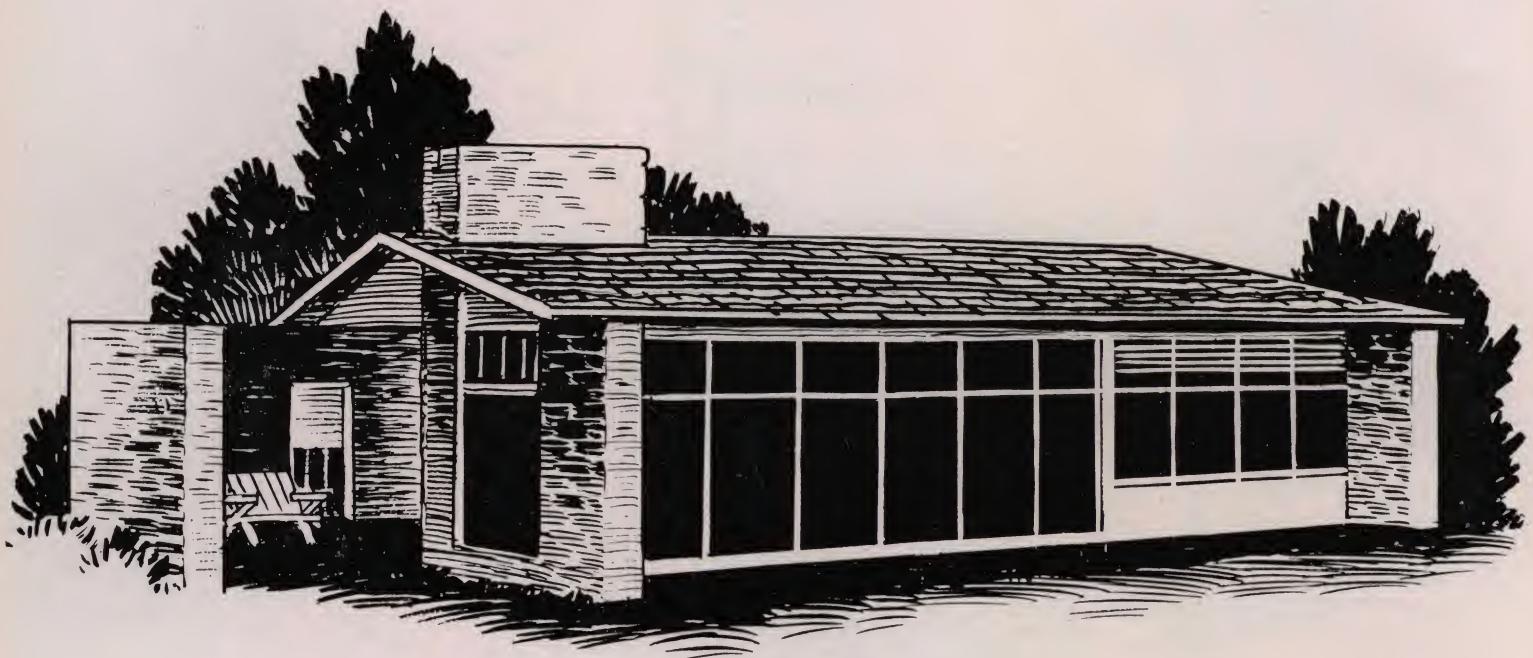
For the more sunny regions, we suggest this attractive cabin with the wide porch overhang. The low pitched roof is in line with early California haciendas.



Tourist Cabin

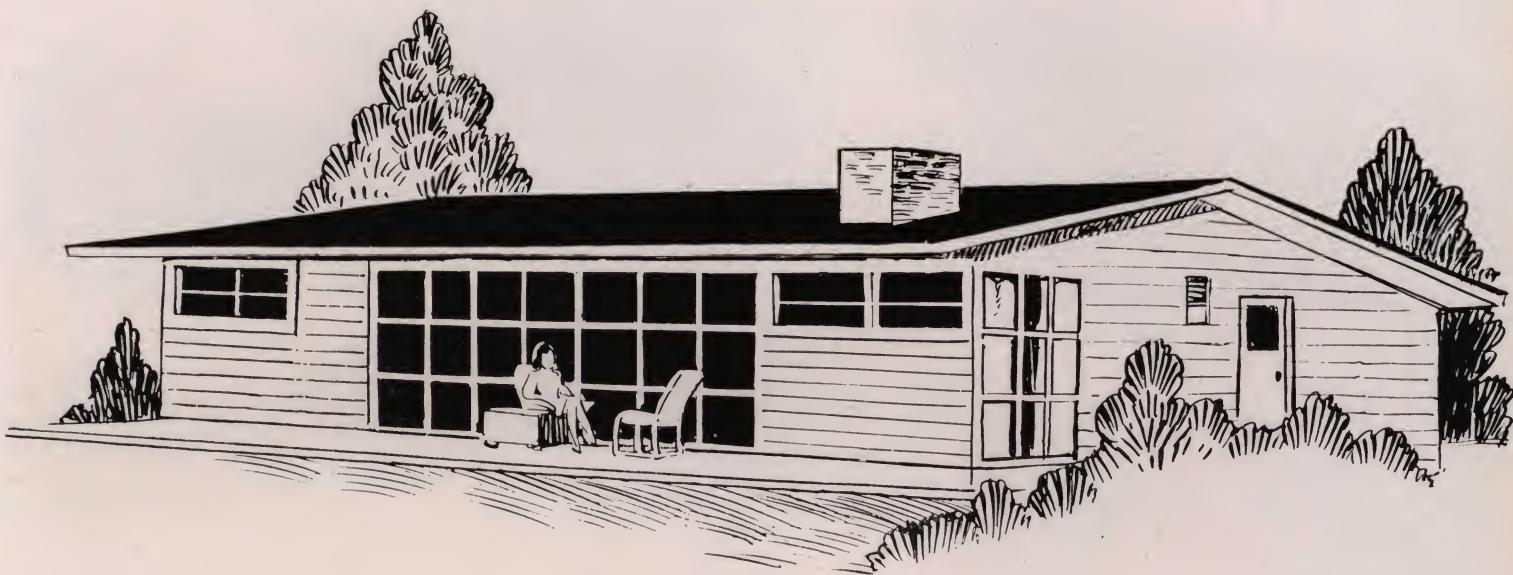
This popular design has been used throughout the country for Auto Camps. The two-car garage between the cabins gives shelter in bad weather. This type of cabin may be built with or without toilet facilities, depending upon the amount of money to be expended.





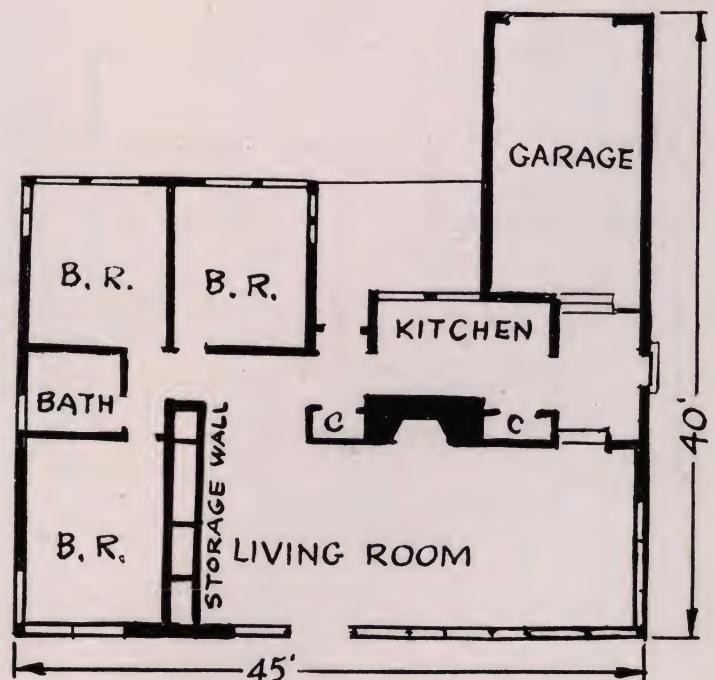
The Winnipauk

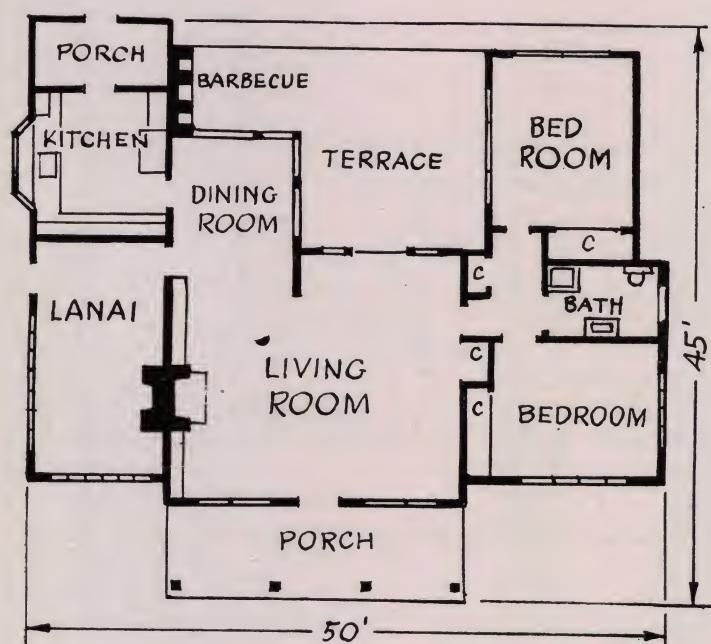
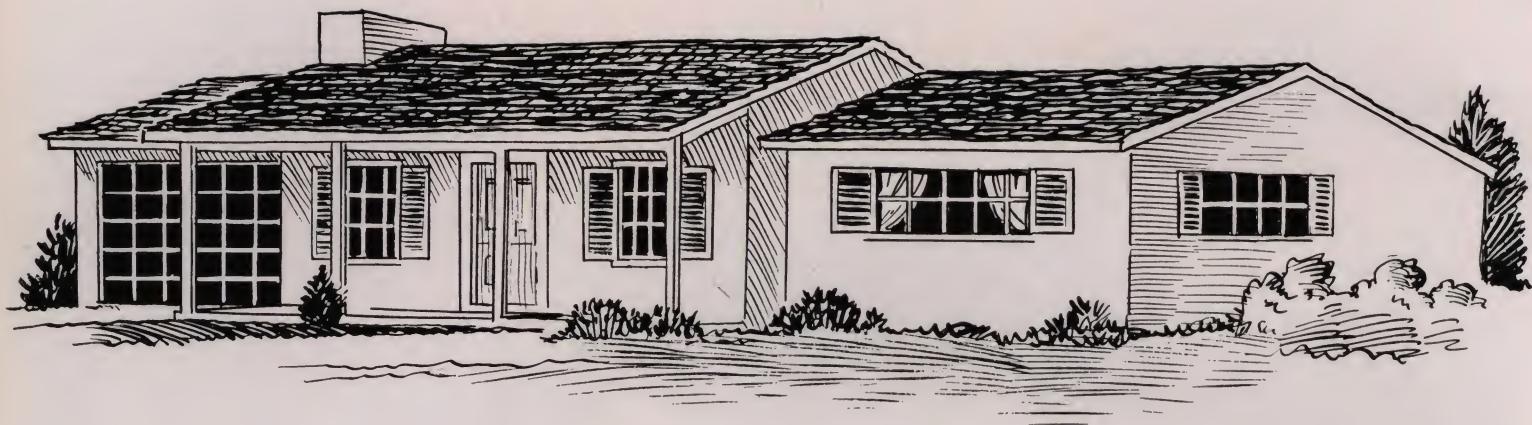
The Winnipauk is a low cost modern cottage full of architectural surprises.



The Monterey

The Monterey, with its sliding doors, which may be used as the weather dictates, is typical of California.





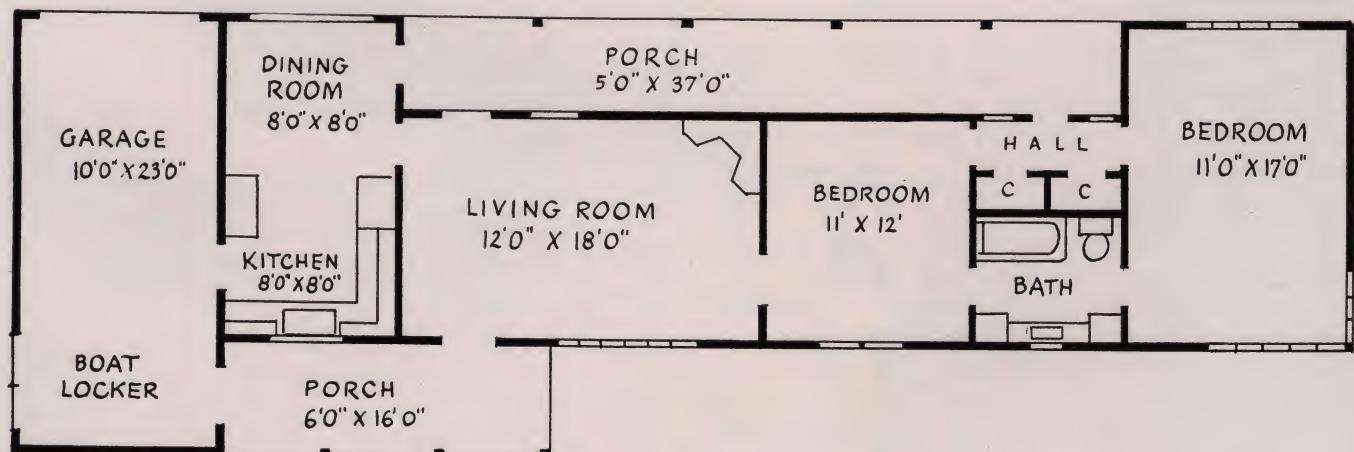
The Santa Barbara

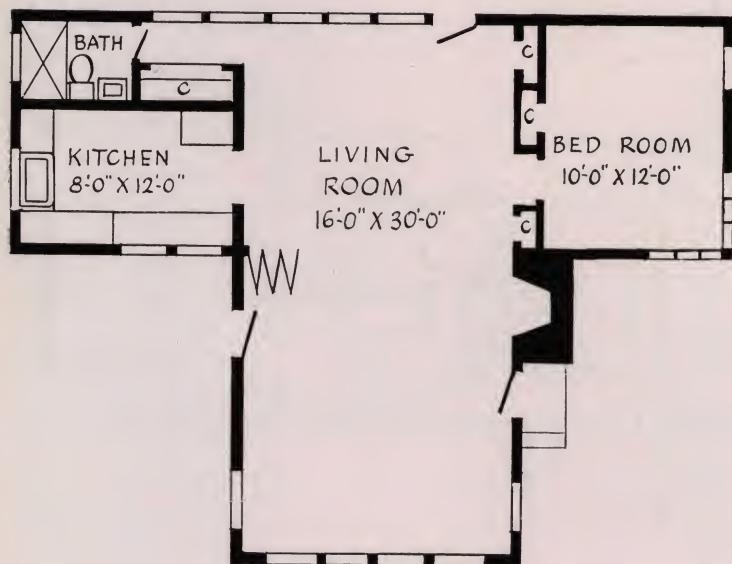
The Santa Barbara is a compact, two-bedroom cottage with enclosed lanai for shelter against the off-shore fog. The terrace with barbecue is ideal for summer gatherings.



Lake Geneva

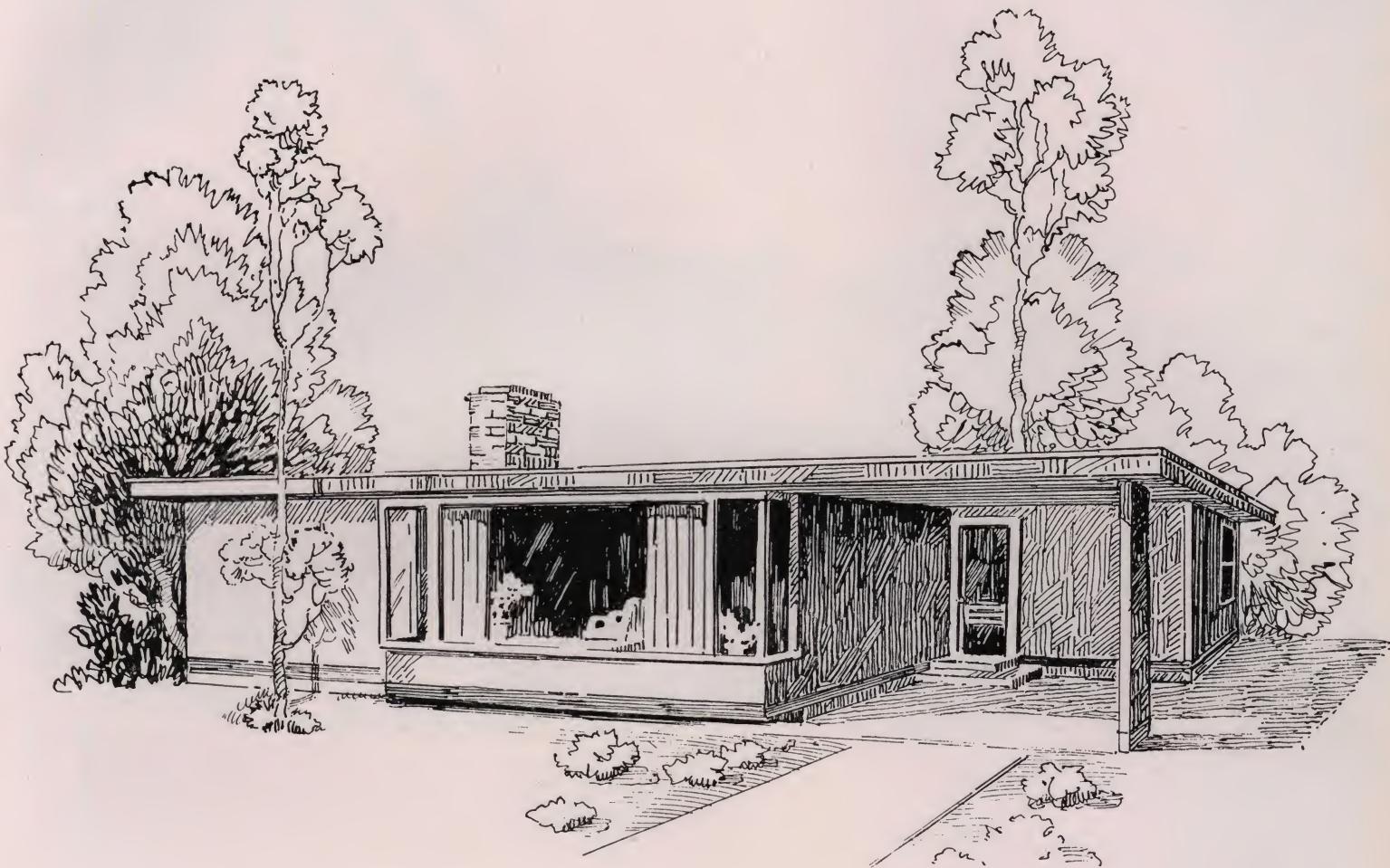
Architecturally correct, with large windows, front and back porch, the Lake Geneva is an excellent permanent or summer home.





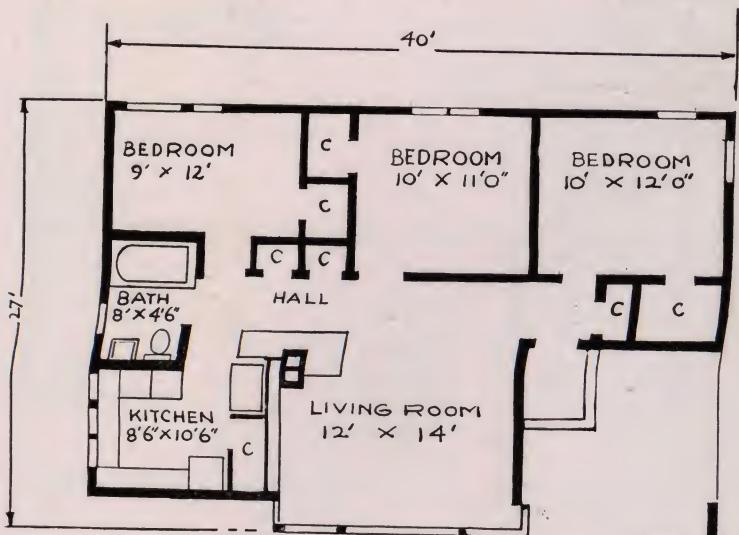
Sausalito

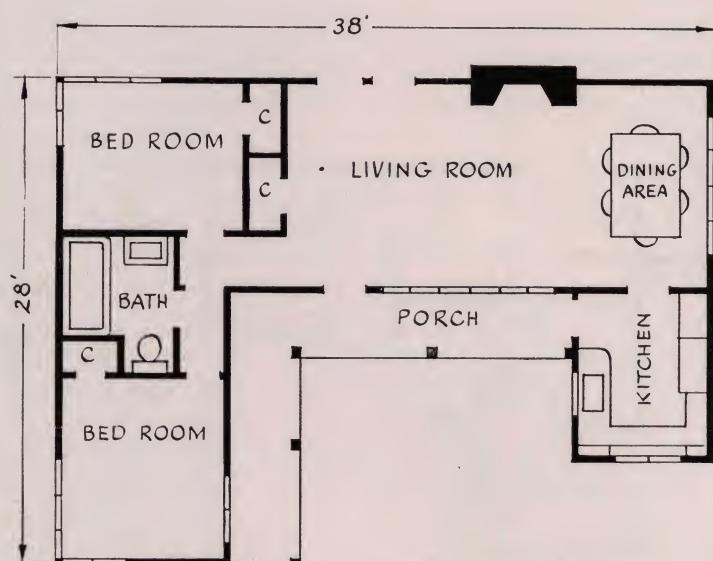
This modernistic cottage is suitable for irregular or uneven ground where the view is of prime importance.



Coronado

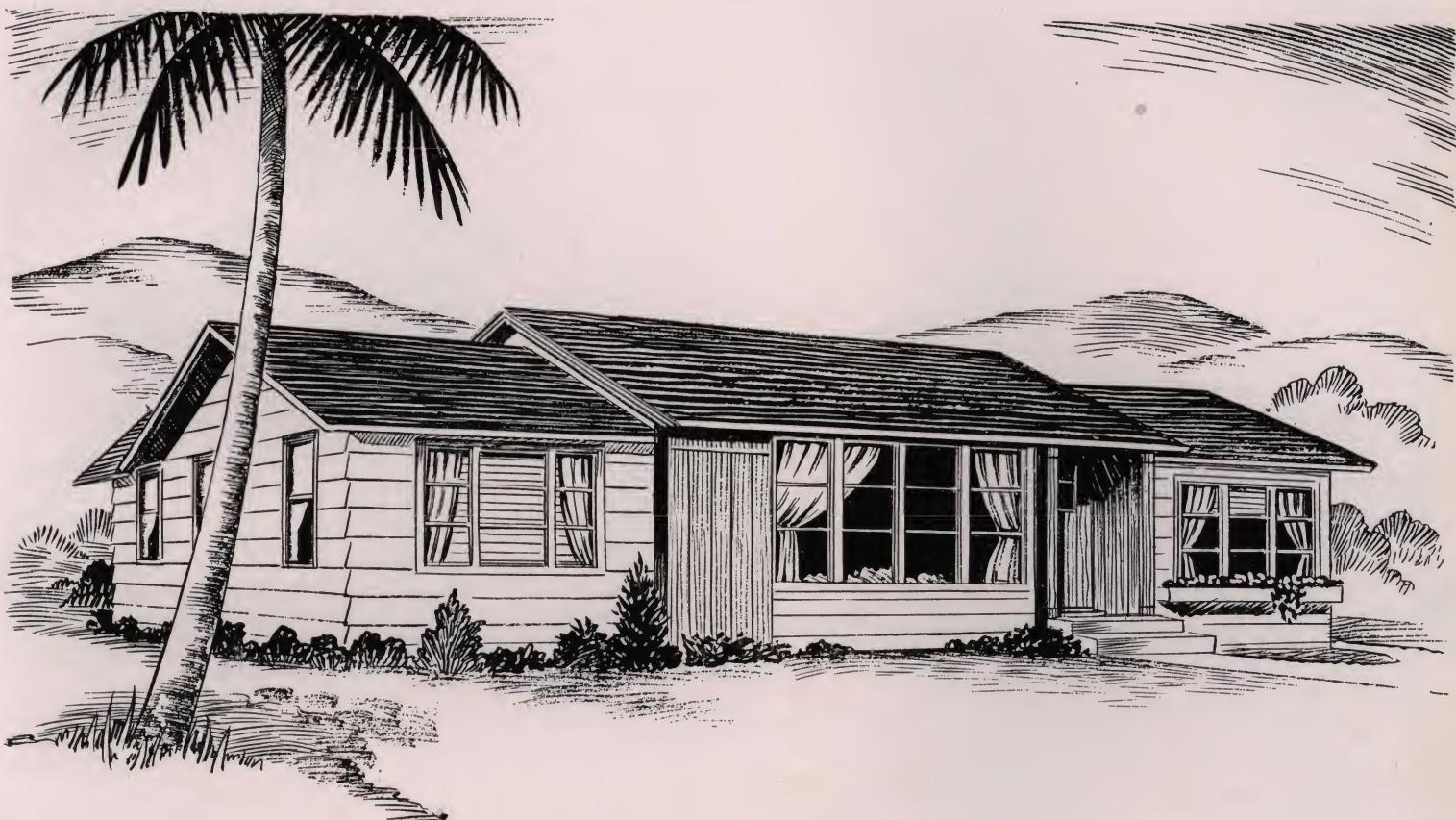
For a roomy modernistic cottage the Coronado is complete in every detail. It is ideal for a sea-shore location.





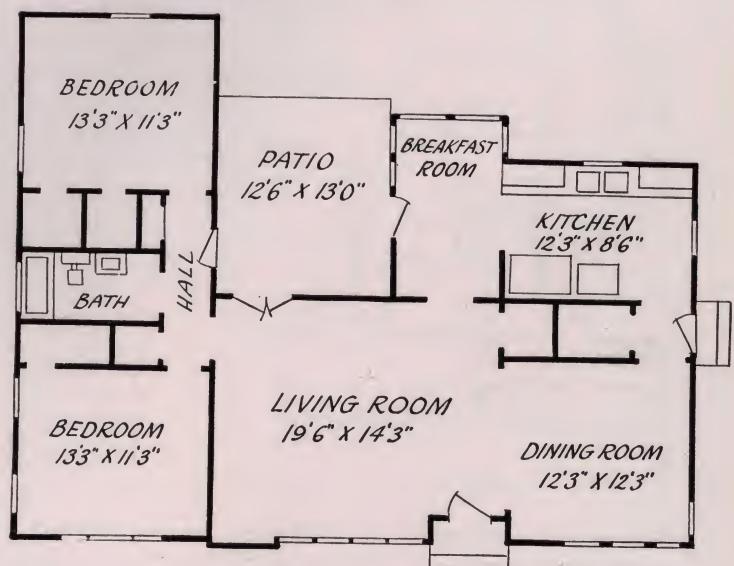
The New Bedford

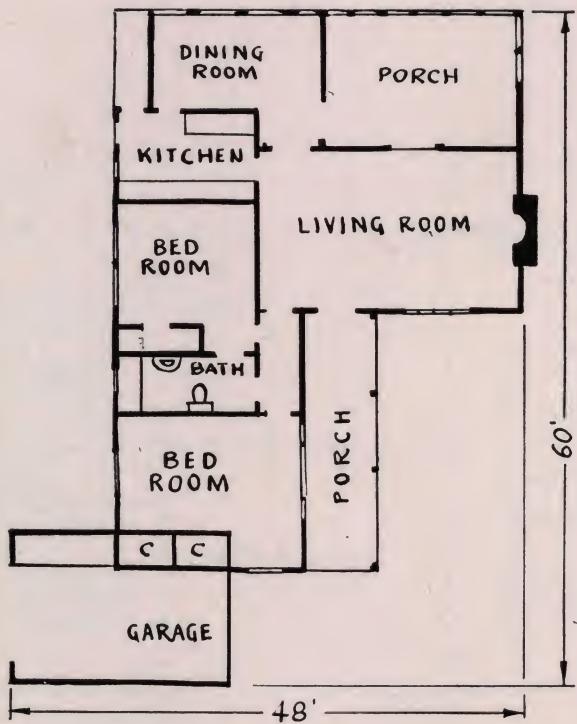
This practical five-room cottage embodies the spirit of comfortable living. Its informal design satisfies all demands for a modern home.



The Kuliouou

True to the local color of Hawaii is the low elongated "hale" complete with large sliding windows, overhanging eaves and ever popular patio or lanai.





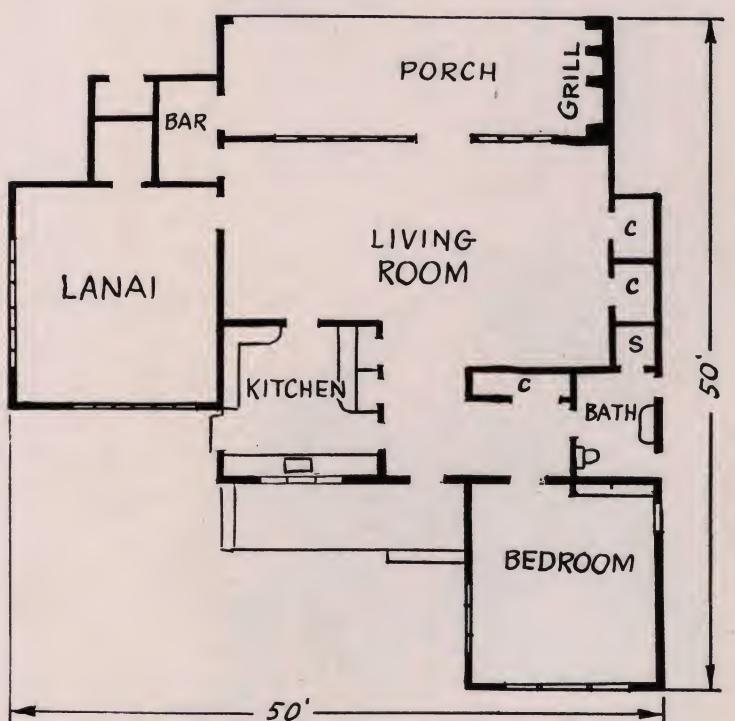
The La Jolla

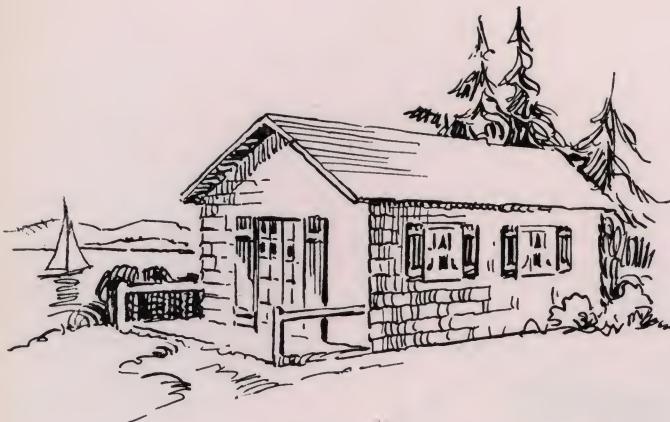
The La Jolla with its rambling design and distinguished exterior makes for comfortable living.



The Guadalupe

Charm, comfort and convenience are built into this attractive home. The Lanai gives protection in cool weather and the open porch with grill is ideal for hot summer days.

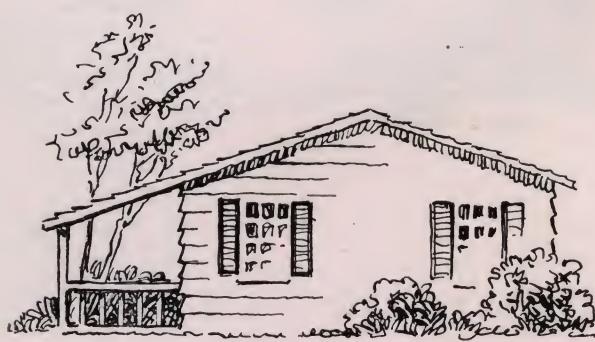




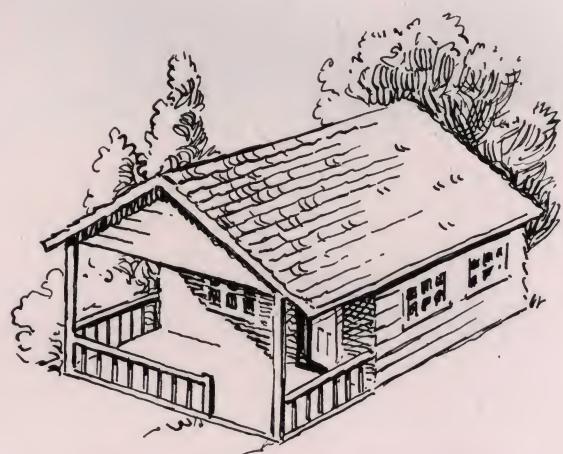
Open Porch



Porch Roof Tied Into Main Roof



Roof Continued Over Porch



Roof Continued Over Enclosed Porch

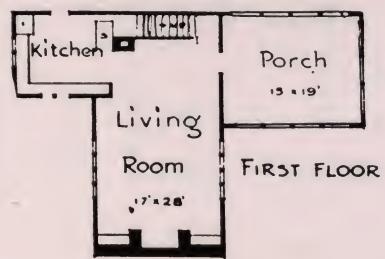
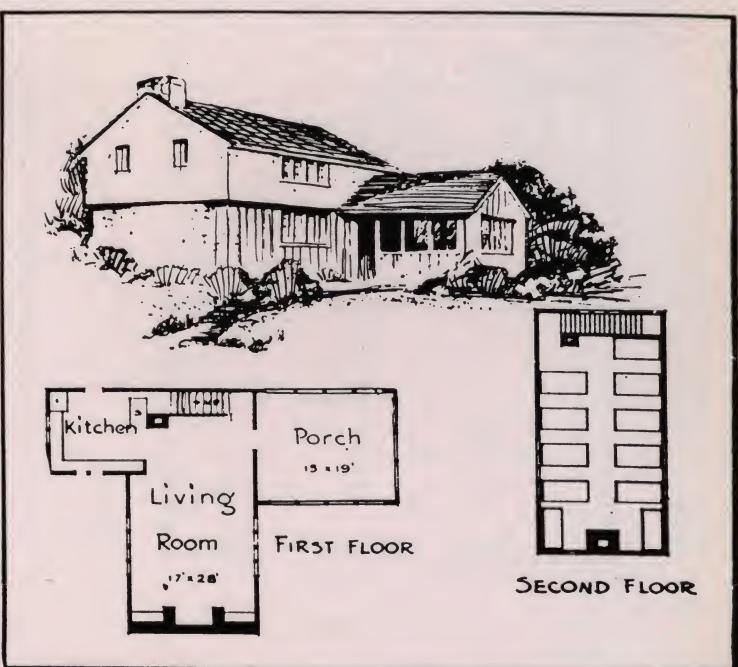
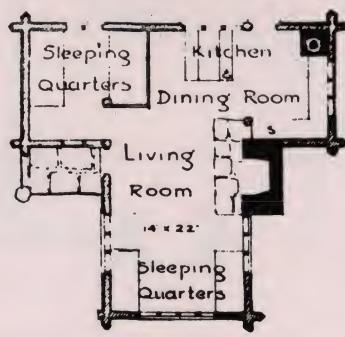
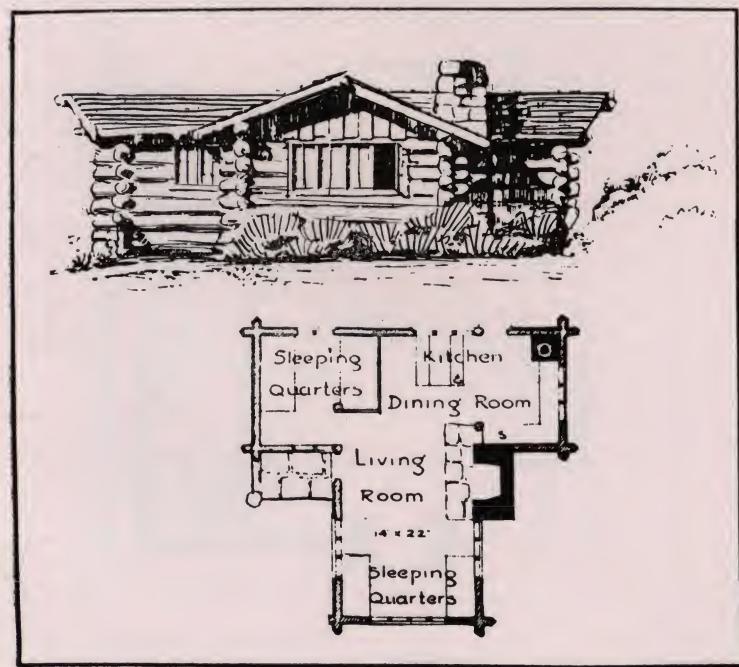
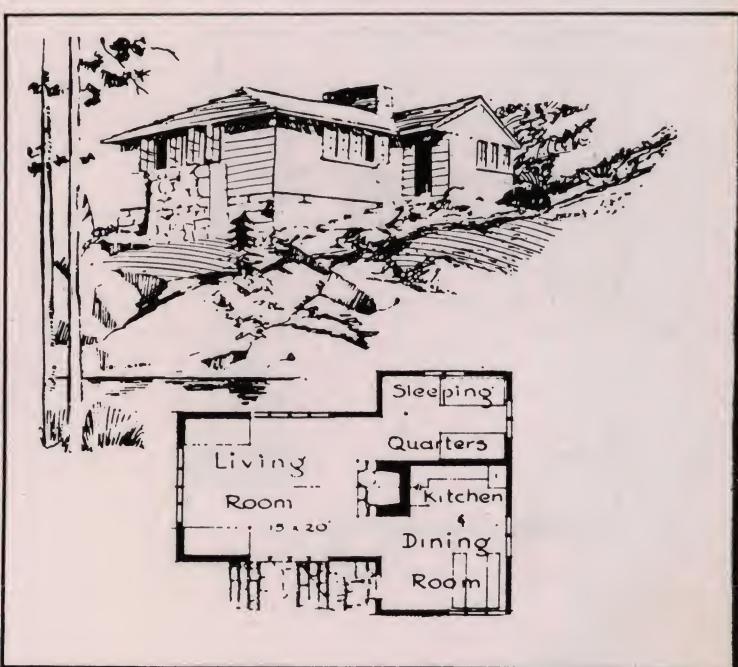
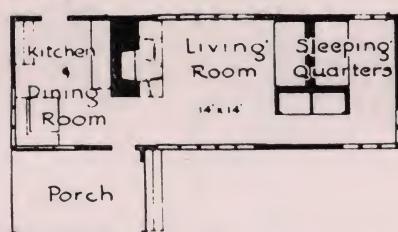
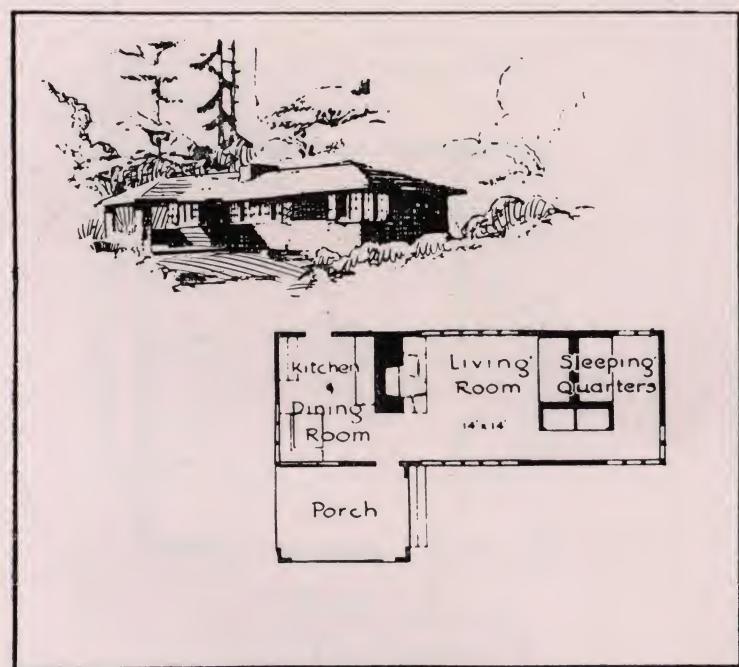
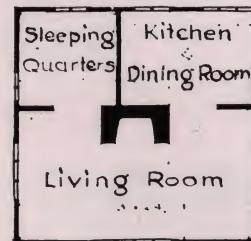


Hip-Roofed Porch

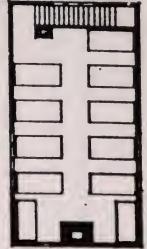


Porch Roof Tied Into Side Wall

Porch Suggestions



FIRST FLOOR

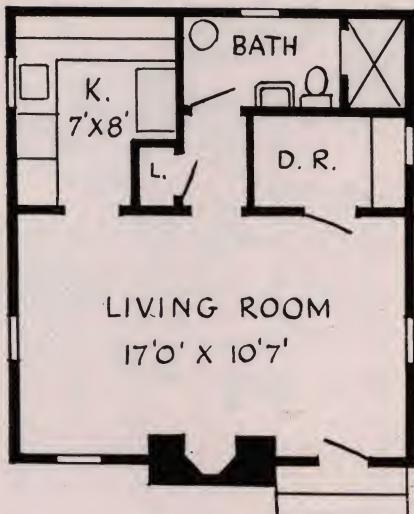


SECOND FLOOR

Cabin Elevations

Courtesy U. S. Department of Agriculture

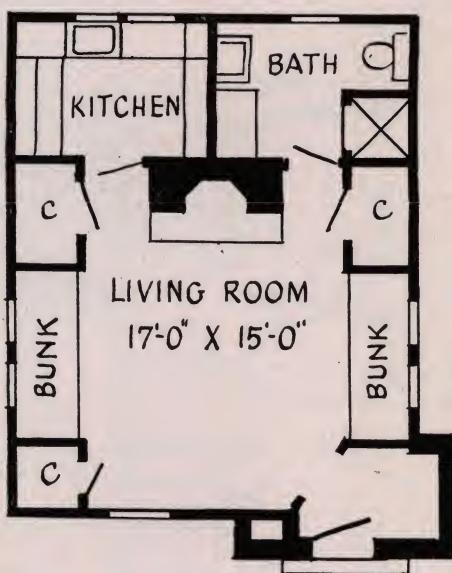
FLOOR PLANS



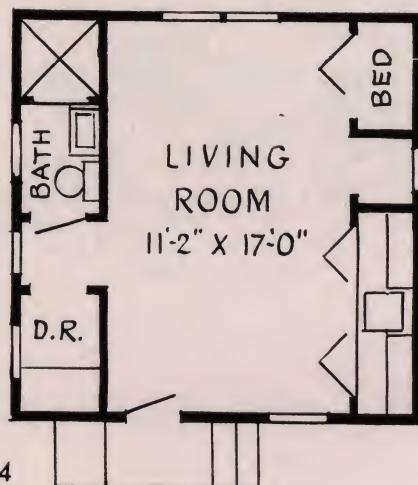
A-54



B-54



C-54



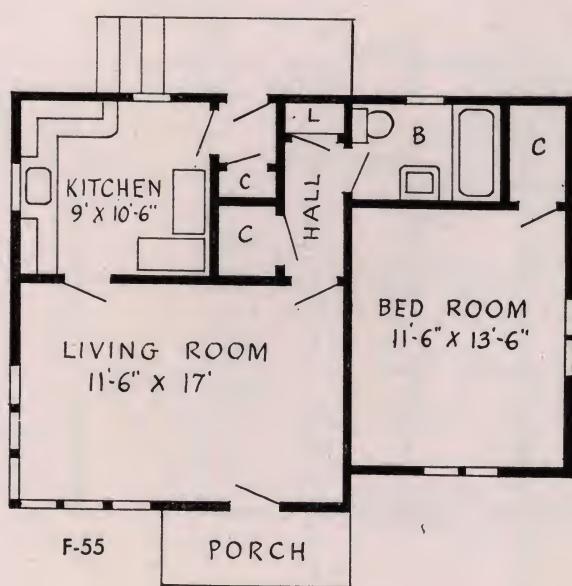
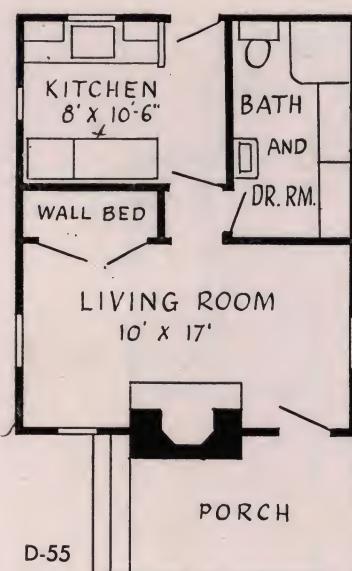
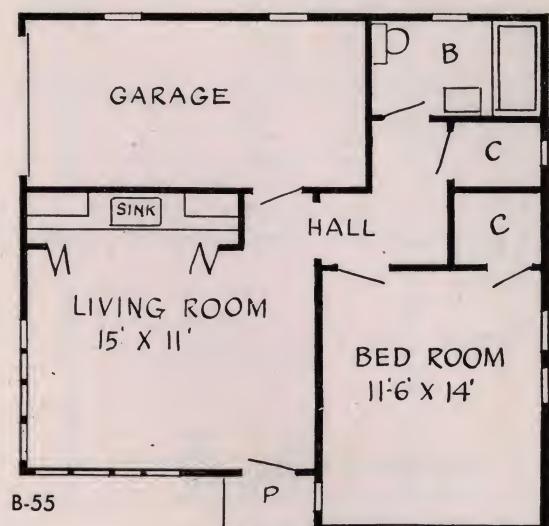
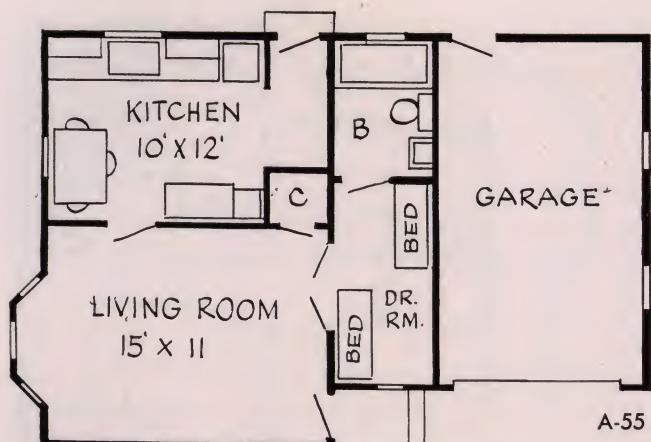
D-54

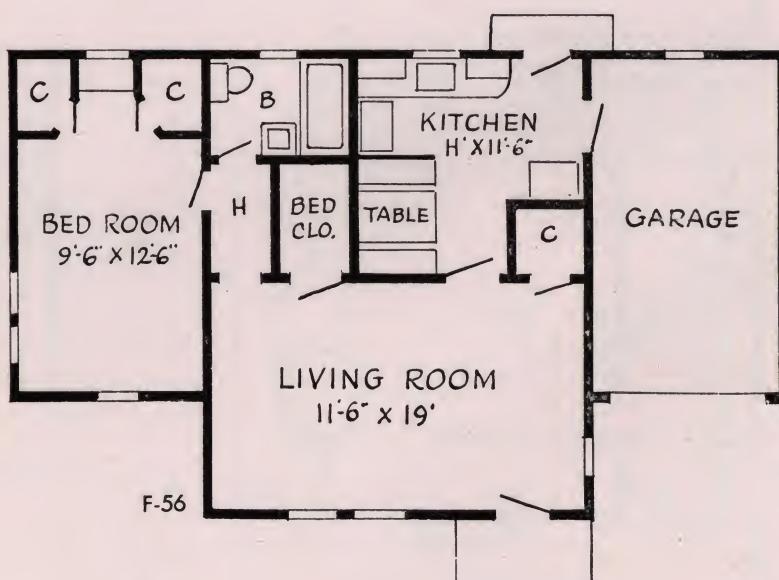
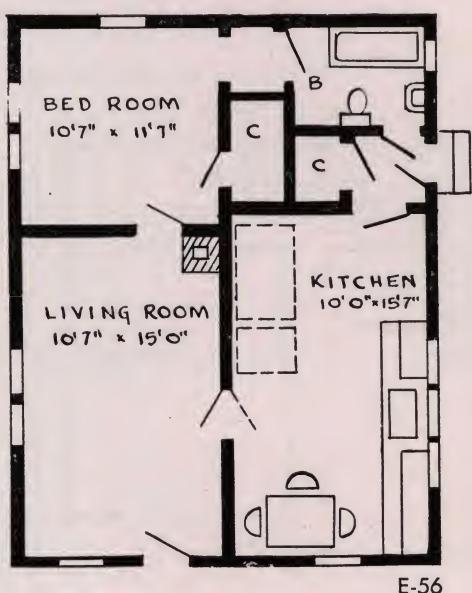
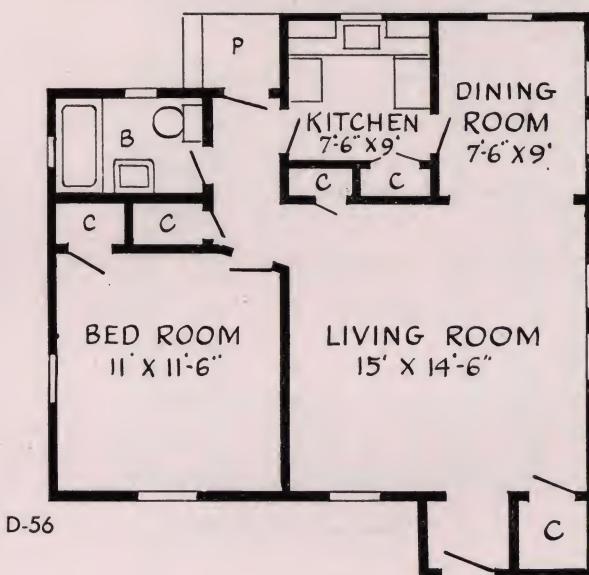
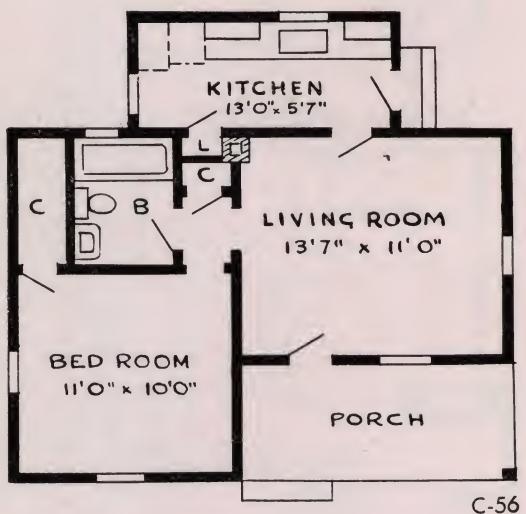
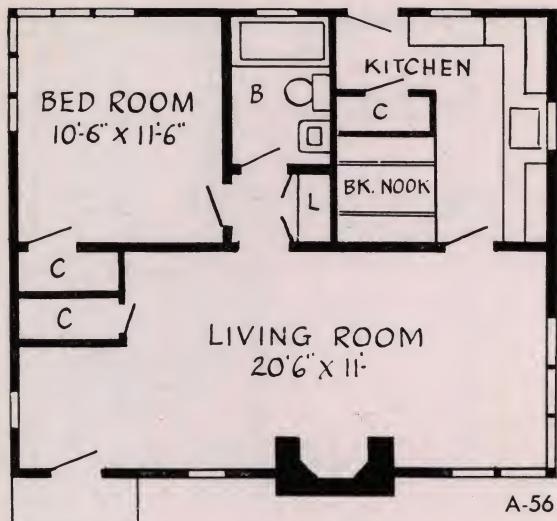


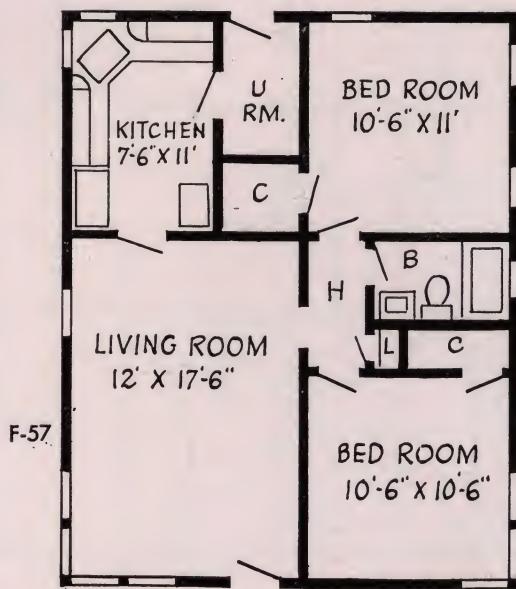
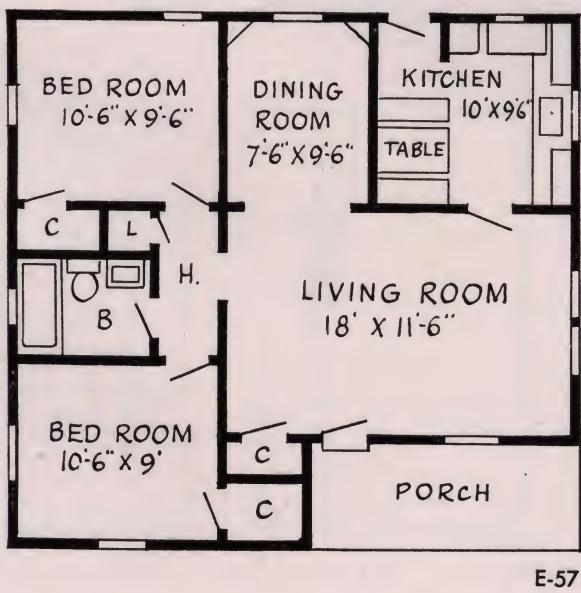
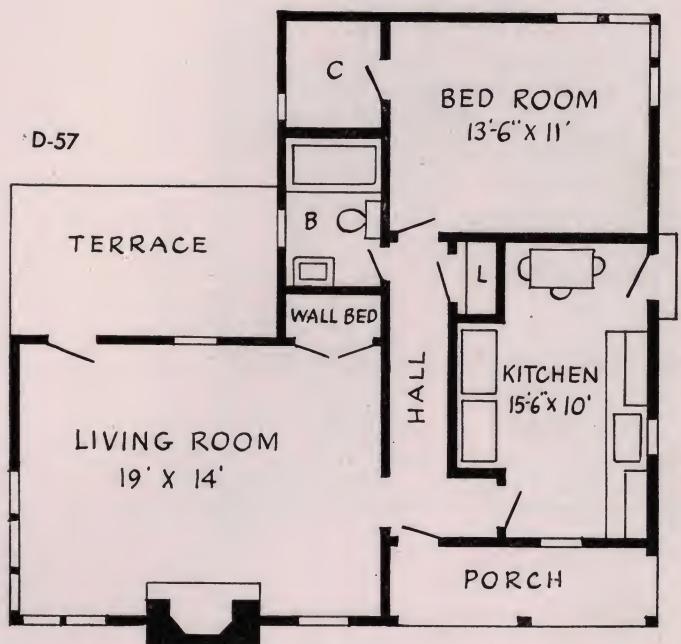
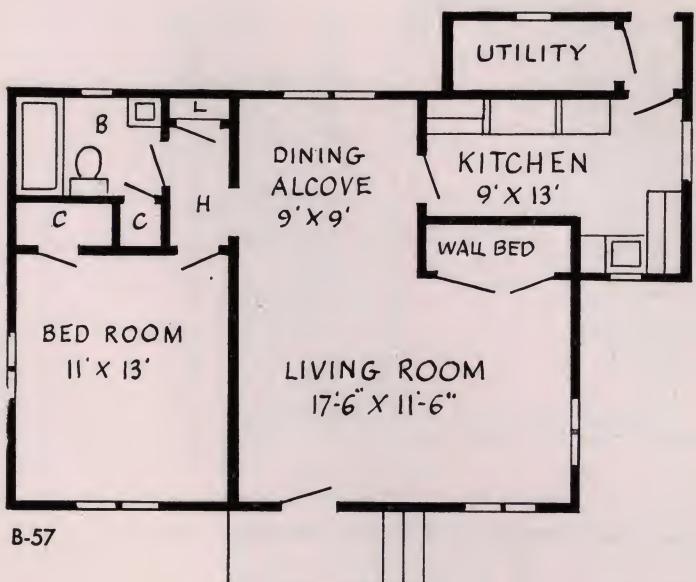
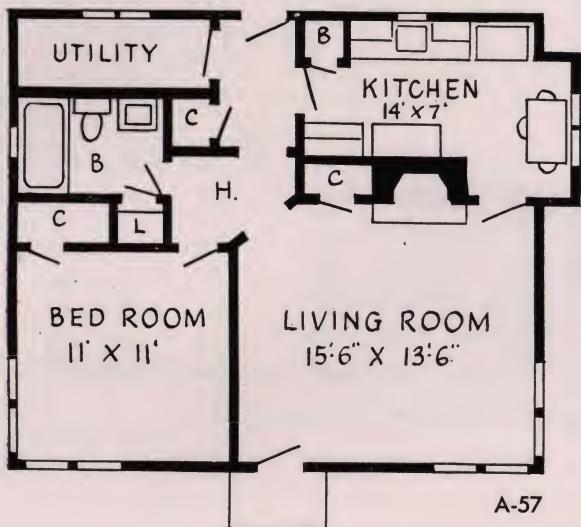
E-54

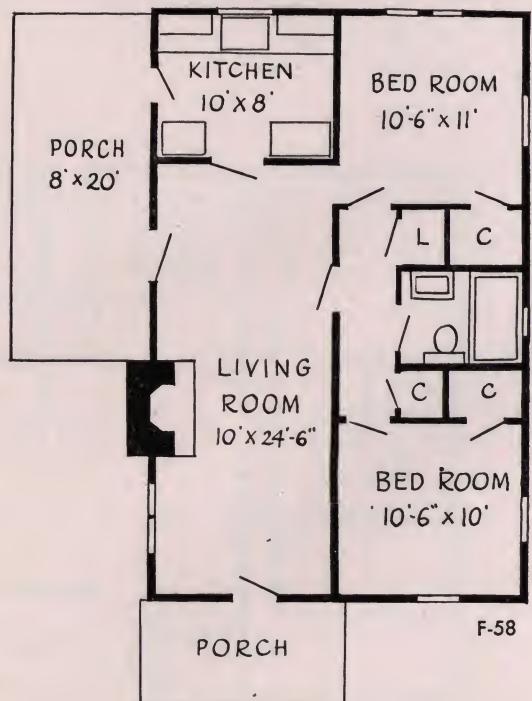
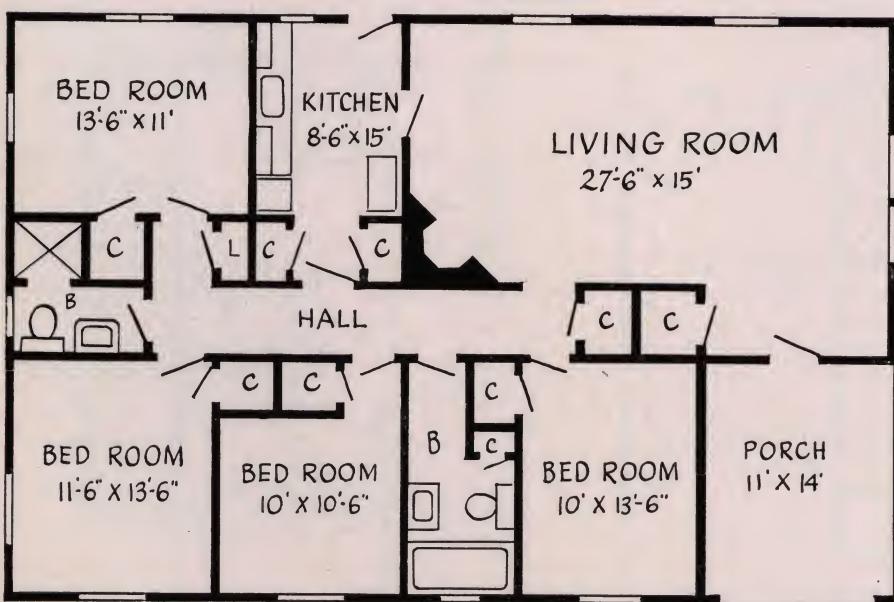
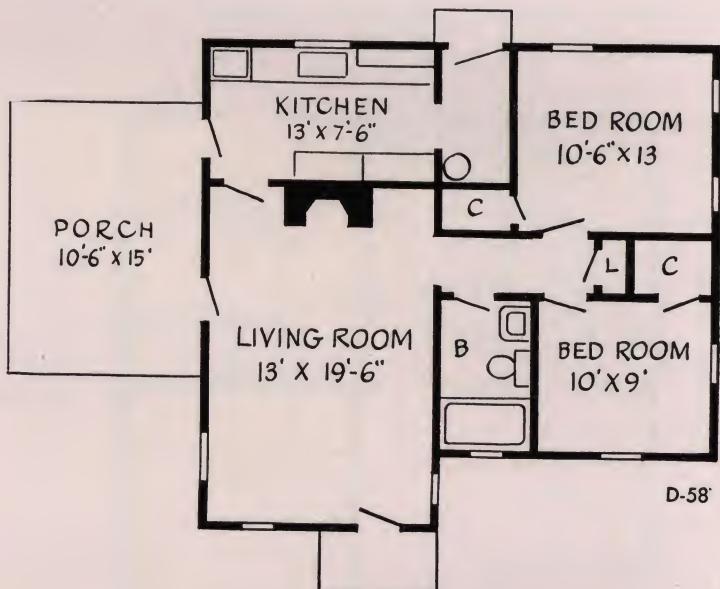
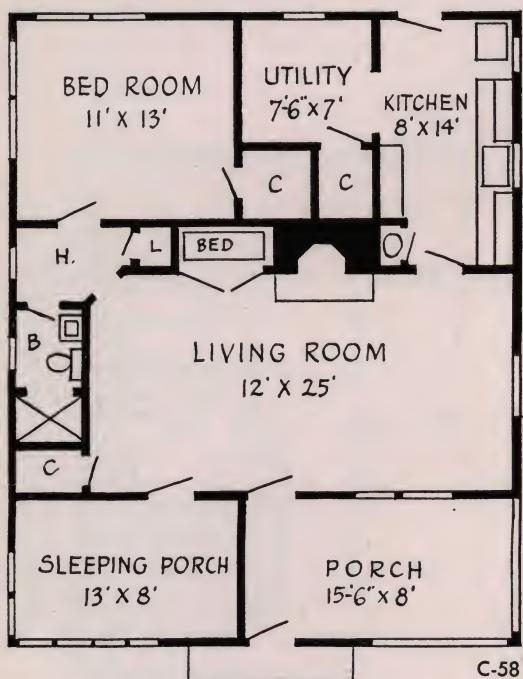
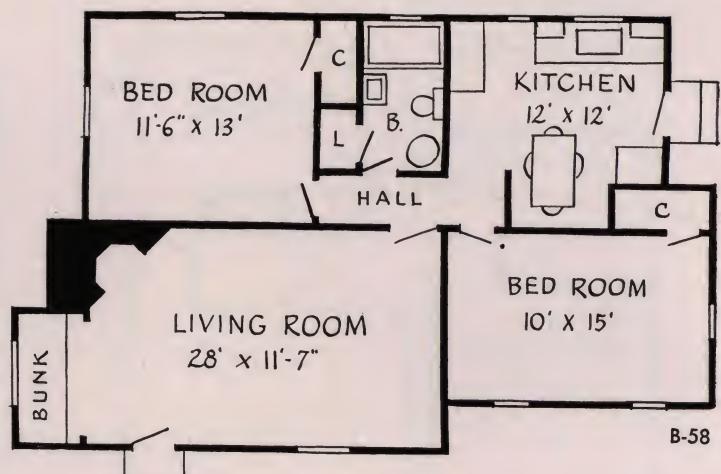
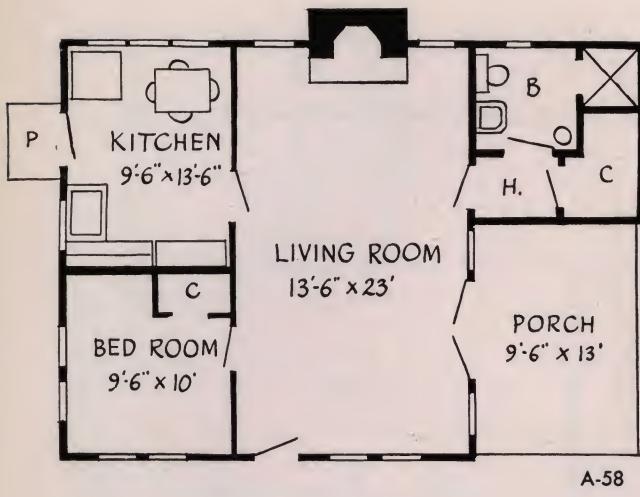


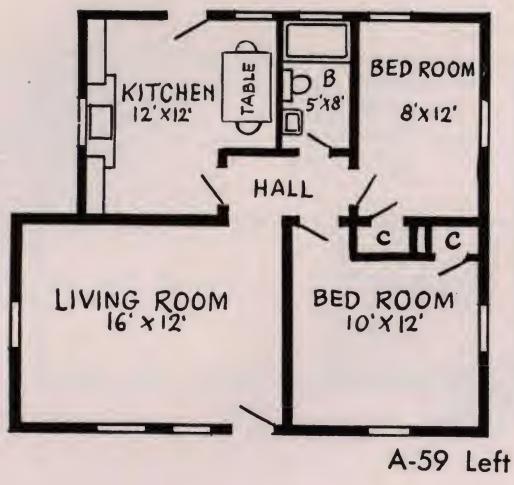
F-54



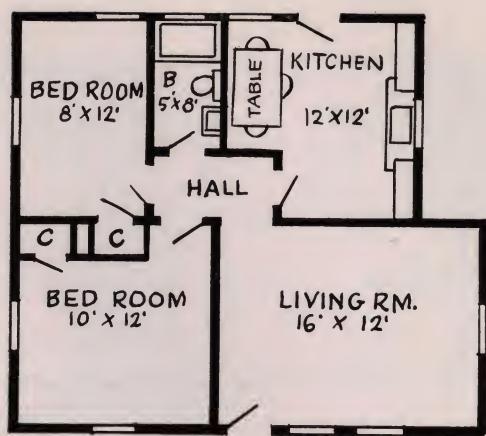








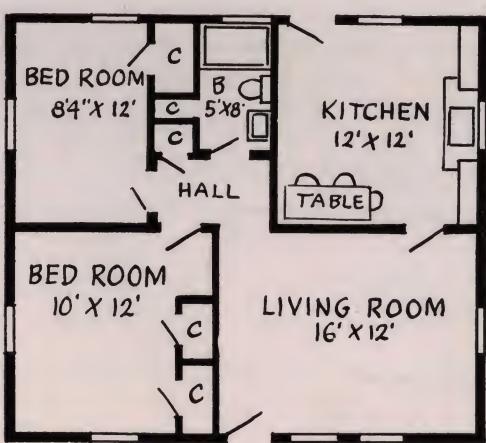
A-59 Left



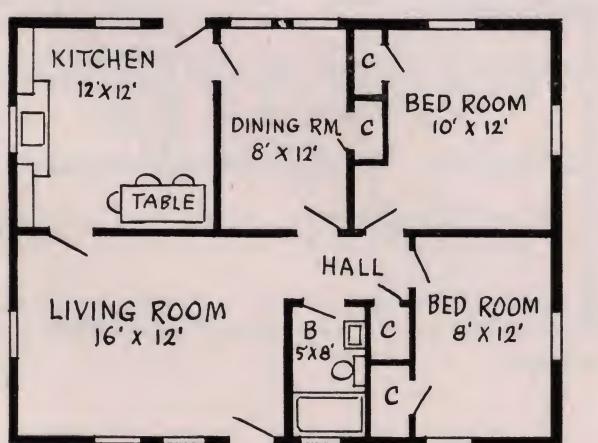
A-59 Right



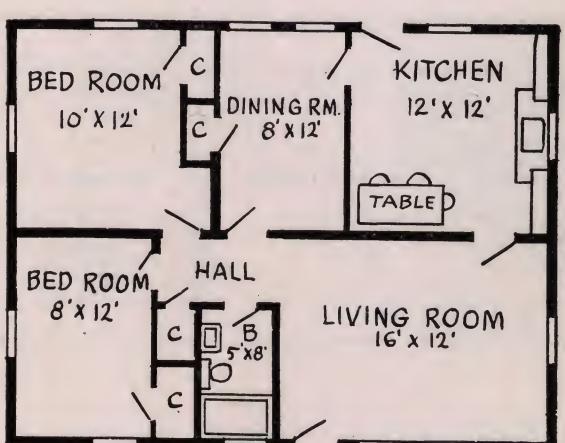
B-59 Left



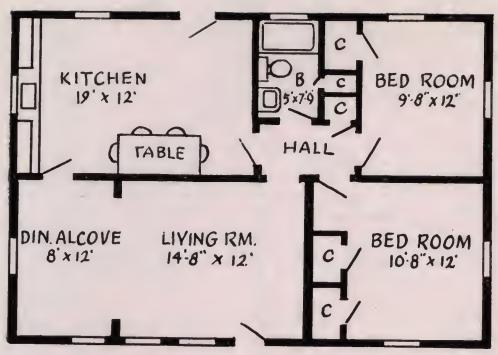
B-59 Right



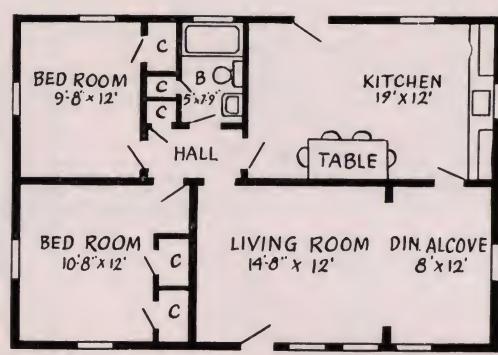
C-59 Left



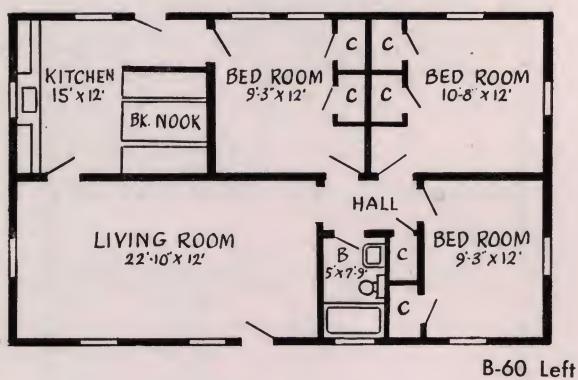
C-59 Right



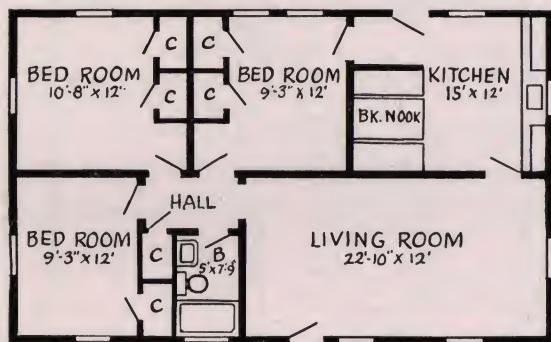
A-60 Left



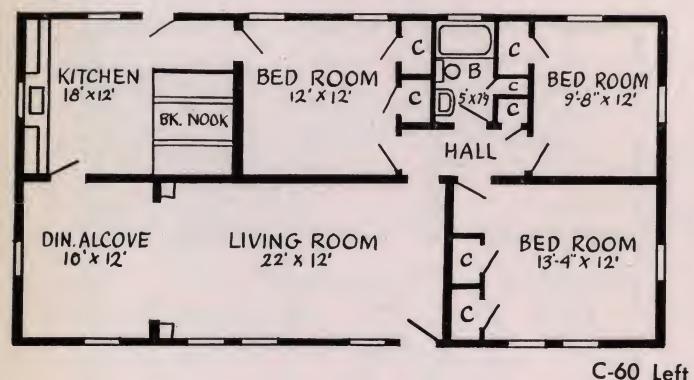
A-60 Right



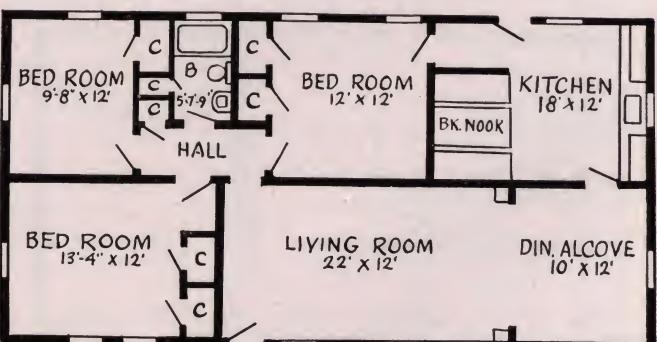
B-60 Left



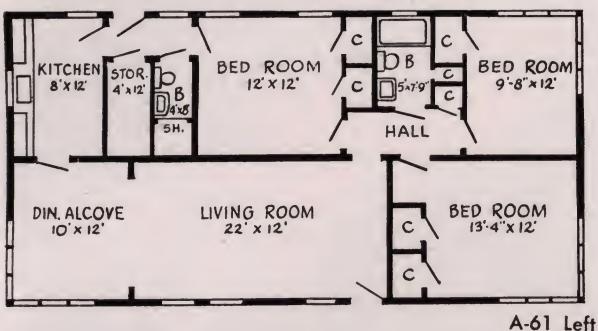
B-60 Right



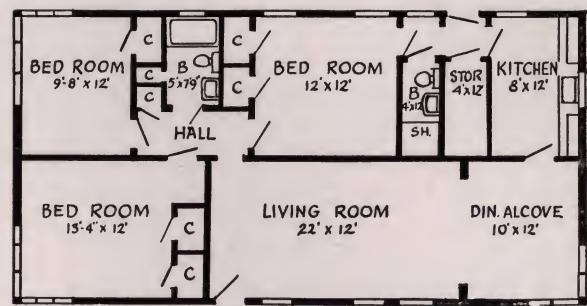
C-60 Left



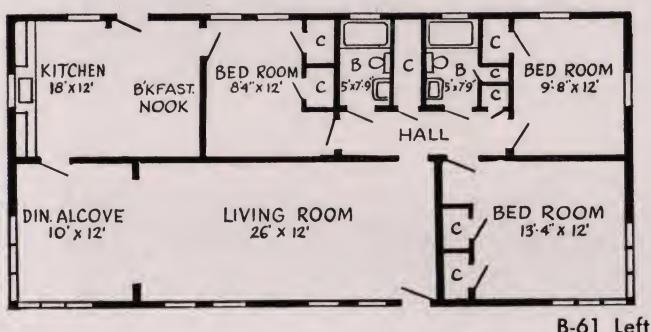
C-60 Right



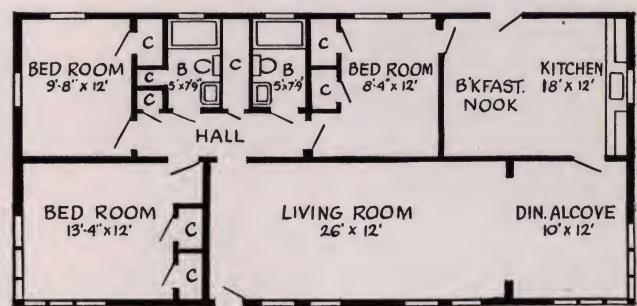
A-61 Left



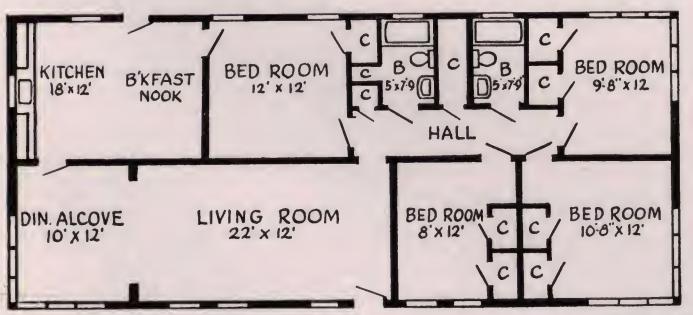
A-61 Right



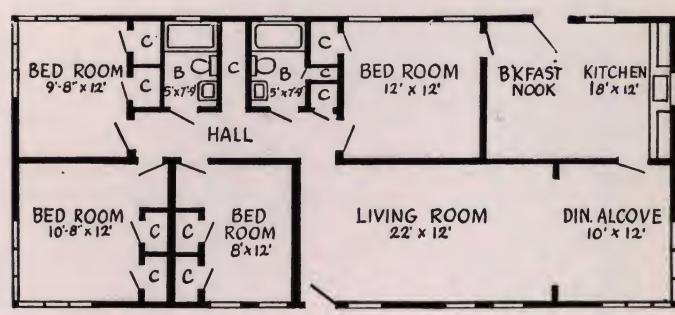
B-61 Left



B-61 Right



C-61 Left



C-61 Right

PREFABRICATED HOMES



I am of the opinion that prefabricated houses in the years to come are going to find ready acceptance throughout the nation. The conventional type of home will, of course, continue to be built in tremendous quantity. However, from information I have been able to gather, the resistance from certain groups against prefabricated homes will gradually fade out of the picture as the public is informed of their merit and economy.



"Tovell" House

Q. What is a "Tovell" House?

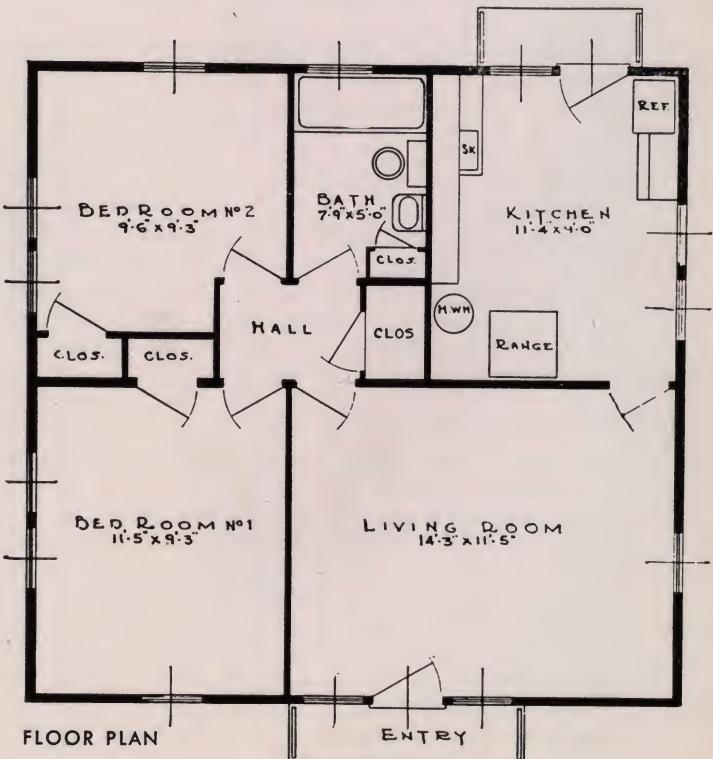
A. It is known as a "prefabricated house" because it is made in the Tovell prefabrication factory, by precision methods, so that it can be delivered anywhere in "knock-down" form and quickly erected, requiring only a matter of days instead of the many months required to build the usual type of house. The Tovell factory is located on the Central of Georgia Railroad near Warm Springs, Georgia. Adequate lumber of good quality is available near the plant and the labor is all obtained locally, having been well trained in the prefabrication industry during the war period, when this factory supplied Tovell Houses exclusively under a contract with the United States Federal Public Housing authority for shipment to our allies England and France. These contracts were terminated when Lend-Lease was cancelled.

The Tovell plant, one of the most modern of its kind in the world, has the facilities for manufacturing 50 complete houses per 24 hour day. If orders are received for houses faster than the factory can produce them, preference in time of delivery will be given to returned war veterans.

Q. Is this a summer cottage or an all year round house?

A. The "Tovell" House is definitely an all year round home suitable for summer and winter.

Q. How many rooms does it contain and of what size and description?



A. The house is 24 feet square, contains two bedrooms, bathroom, living room and kitchen, with closets for each bedroom, a closet in the bathroom and a large closet in the hall. The main bedroom on the front of the house is 11'5" x 9'3"; the second bedroom is 9'6" x 9'3". The bathroom is 5' 0" x 7'9". The living room is 14'3" x 11'5"; and the kitchen is 9'0" x 11'4". All ceiling heights are 7'4". All of the rooms are adequately lighted and ventilated by means of large windows, which are hinged and provided with proper hardware.

Q. What kind of a roof does this house have?

A. The roof is what is known as a flat roof, but has sufficient pitch each way from the center to properly drain water from the roof. On the front and back, the eaves overhang two feet and on the ends approximately nine inches, for proper protection of doors and windows. The roof panels are constructed with wood rafters and have either plywood, Homasote sheathing or cement asbestos board applied direct to the rafters. These panels contain the proper amount of insulation, having prime coated insulating boards attached to the under side to form the ceiling finish of the rooms. The roof panels also have blanket insulation installed above the insulating board of either cotton, mineral wool or aluminum foil. Roofing material is applied after the house is erected and for best results should be what is known as smooth surface built-up asphalt roofing and should be applied by a qualified roofing contractor in your vicinity.

Q. What type of floors does the house have?

A. All rooms contain hardwood flooring properly machine sanded, stained and waxed at the factory. This flooring is shipped in panels 4 feet wide of the required length, made up of strips $\frac{3}{4}$ " thick and $2\frac{1}{4}$ to $3\frac{1}{4}$ " wide, Tongue and Groove, and are laid over wooden joists according to erection plans furnished by the factory which will ensure the proper rigidity and strength.

Q. What are the walls made of and are they properly insulated to protect the house from summer heat and winter cold?

A. The structural part of the wall panels is of wooden upright studding. The exterior finish of the house is Homasote composition board, applied to the exterior wall panels in the Tovell factory. The interior finish consists of prime coated insulating board and this too is applied in the factory. Between the exterior and the interior boards of the exterior panels, a vapor barrier of waterproof paper is installed. In those wall panels in which windows and doors occur, both windows and doors are properly fitted, with glass installed and hardware attached. The joints between the panels are covered by a batten strip furnished for both exterior and interior. All windows and doors are supplied with the necessary wood trim, either applied in the factory or furnished cut to length. A prime coat of paint is applied at the factory to the wall panels, both on the interior and exterior walls.

Q. What type of plumbing and heating will the house have?

A. The plumbing unit consists of the following: Kitchen sink, cabinet, complete toilet combination, bathtub and fittings, wash basin and fittings, hot water heater, electric immersion type with tank and insulating jacket, gas range, medicine cabinet and necessary piping and fittings. The type and design of the above articles will depend on the availability of such materials and may not always be the same. Insofar as practical the plumbing system is prefabricated, which means that all piping is cut to length and fittings attached to the extent that shipping facilities are permitted. There is a minimum of exposed piping, none in the bathroom, and only a small amount in the kitchen. Sufficient piping will be furnished to bring the sewer, water and gas pipes through the wall and projecting 1 foot outside the building, at which point it can be connected to the local utility services.

Any plumber in your vicinity should have no difficulty with the installation of the plumbing and range.

Heating: A circulating type space heater that burns either oil, coal or wood is ideal for these houses.

Heating requirements for zero weather for the Tovell House are approximately 45,000 B.T.U. per hour to maintain the inside temperature at 70°F. A space heater of this type located in the living room is sufficient to heat all of the house, provided the doors are left open between rooms.

Q. What kind of lumber is used in the Tovell House and what protection is there against termites, rot, swelling and shrinkage of wood?

A. All of the structural lumber used in the prefabricated house is Southern Yellow Pine. The items, known as millwork, such as window frames, interior and exterior trim, are of Southern Yellow Pine, White Pine or Fir. All of the structural lumber and millwork is properly treated with a pentachlorphenol solution or toxic sealer, which makes the wood resistant to termites and other wood borers, resists rot, and reduces to a minimum, swelling and shrinking of wood.

Q. Will the house be painted at the factory?

A. All of the wood trim which will be exposed, all of the sash, doors, trellis work, including the Homasote exterior finish and the interior wall board, will be shipped from the factory with one priming coat of paint. It will be necessary after the house is finally erected, to apply the final coats of exterior and interior paints in the colors desired by the purchaser. This finish coat of painting should be done by a painter in your vicinity.

Q. Will the house be shipped complete and who will erect the house?

A. The house will be shipped complete from the factory with the following exceptions:

Electric wiring and fixtures, exterior and interior painting, except priming coat on all exposed wood, and roofing. With each house will be provided accurate and complete plans for the installation of the foundation and the erection of the chimney, and also with each house will be provided a complete set of erection instructions for the house. All of the nails, bolts, lag screws, etc., necessary for the erection of the house will be shipped along with the house in a separate package. Any contractor or competent carpenter in your vicinity should be able to follow the directions in the erection manual and install the foundation and build the chimney items, which, of course, must be of masonry. The directions clearly explain how to erect the house, install the plumbing, wiring and heating and apply the exterior and interior paint and the roof. The complete house, ready to move into, or what is known as a "turn key" job, can be accomplished in two weeks from the time the foundation is started until the final house is completed. Erection of the parts, the trimming out of the house, should not take over from two and one half to three days, with a force of four to six men.

Q. How will the Tovell House be packed and delivered?

A. The house will be shipped from the factory in whatever type of crating we find necessary for its protection in transit. Shipment will go forward in box cars or by trailer truck, depending upon the distance. If by trailer truck, it could be unloaded at the site of erection, or if by box car as an LCL shipment, it would have to be unloaded at the nearest freight station and trucked to the site. There would be sufficient weight, however, that the shipment should move the entire way in the originating car and not be disturbed in transit.

GUNNISON HOMES

Gunnison Homes come in eight sizes, ranging from a two-bedroom to a three-bedroom house and can be dismantled, moved and re-erected.

The floors, walls, ceilings and roofs are manufactured in standardized, interchangeable, four-foot wide plywood panels, which are fabricated, insulated and completely finished in the plant. These panels, when assembled, will withstand a wind load of 200 miles an hour as compared with 70 miles an hour for a conventional house.

Gunnison Homes stress individuality in a multitude of floor lay-outs, decorative design and architectural detail.

Courtesy

GUNNISON HOMES, INC.

Subsidiary of
The United States Steel Corporation
New Albany, Indiana



A Gunnison Home



A Gunnison Home



An Interior View of a Gunnison Home



An Interior View of a Gunnison Home



A "Quonset 20" adapted to summer home use — insulated and ventilated at a minimum of cost for a maximum of comfort and livability.

Courtesy Great Lakes Steel Corporation, Detroit, Michigan



"Quonset 20" Housing Interiors





Prefabricated Plywood Cottages



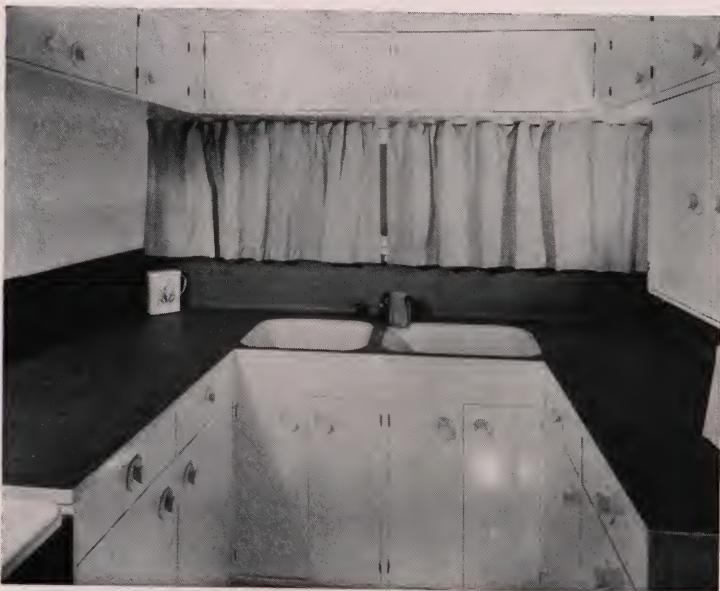
Courtesy Douglas Fir Plywood Association, Tacoma, Washington



In this interior the plywood wall panels were placed horizontally. Light stain is the finish for walls, while the plywood ceiling is painted white.



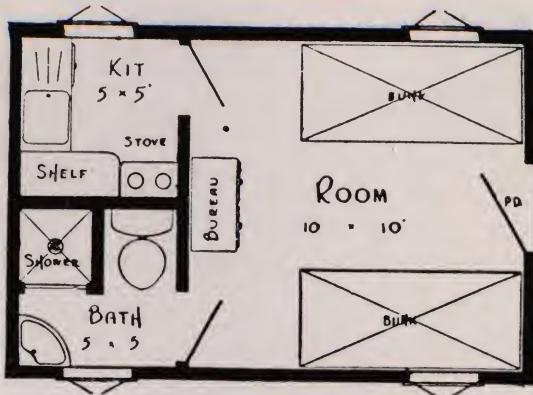
In this model bedroom the fir plywood walls are varnished to retain the natural wood appearance. Insert moldings placed vertically accentuate paneled effect. Often light stain finishes which subdue the grain contrast and provide soft pastel shades are used for plywood walls.



Just as in the home, cabinets, closets and other built-in features are necessities in cottages. Plywood is the accepted standard material for such installations, with three-quarter-inch thick panels usually specified for cabinet doors, shelves and for work surfaces to be covered with linoleum.

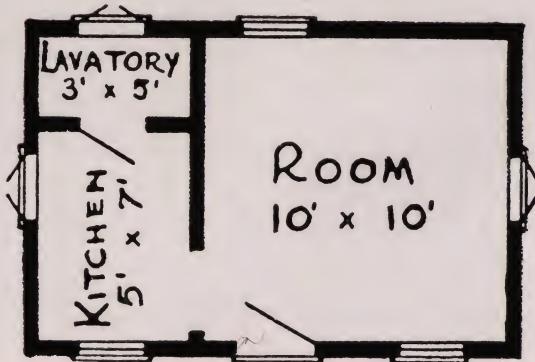
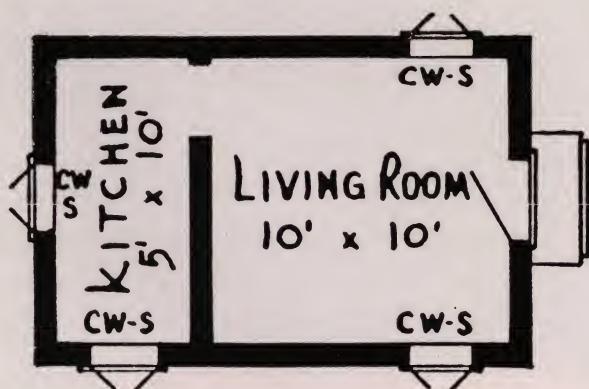


Interior of a model cottage shows how serviceable can be the structures even though of minimum size. Plywood walls here are given light stain finish; they are split proof, crack proof and will withstand rough wear.



Hodgson

The three plans on this page illustrate how the same size cabin may be laid out for various uses — playhouses, fishing and hunting cabins, skating houses, week-end cabins, over-night cabins, etc. Being wind tight, very little heat is required to keep them comfortable on the coldest days. Attractively finished outside, with clean fibre lining on the inside, they need little care and upkeep.

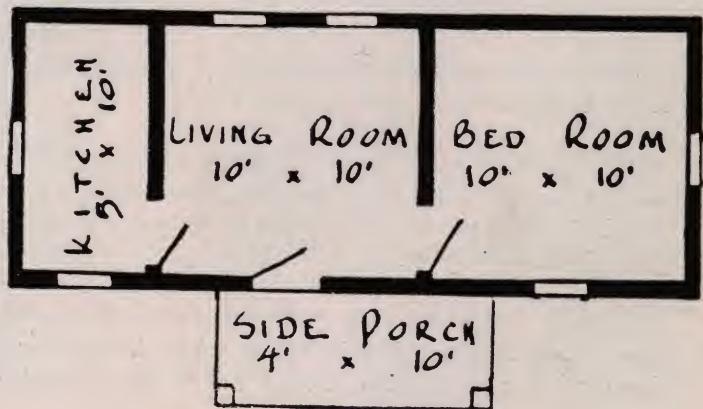
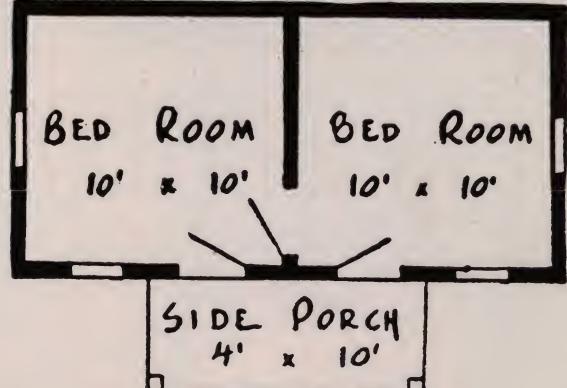


Courtesy E. F. Hodgson Co., Boston, Massachusetts

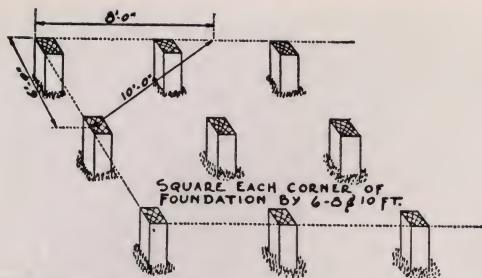


Hodgson

This camp is shown in two floor plans with side porch and with windows and doors as shown in the plans. Rooms are easily added at any time. More or fewer doors and windows may be used.



Courtesy E. F. Hodgson Co., Boston, Massachusetts



Starting a Post Foundation square and level.
Use 6-8-10 ft. to square foundation.

Fig. 1

After building is erected, wire covered openings should be left for this purpose. Set corner posts first. Locate intermediate posts at 5-10-15 feet, etc., on tape, so that there will be no variation. Be sure foundation is square and posts level with each other. The floor will be $4\frac{1}{2}$ inches higher than top of posts. If plan includes a four foot wide porch, or any End Porch (with peaked roof), posts will be on same level as main floor posts. If the eight foot wide Open or Clapboard side porch is used, tops of posts supporting these porches should be set $6\frac{1}{2}$ inches below posts of main house floors. Floor sections are set directly on posts, and strap irons are sent with the hardware to fasten them to same, A, fig. 2. Filling in strips are furnished, to fill the space in flooring where sections join.



Fig. 3

PEAKS—After roofs are all on, partition peaks should be put in. These are designed to set on top of tie beam C. Fig. 3, and should be screwed to tie beam and roof rafters.

HIGH TIE BEAMS—These tie beams are located every 5 feet throughout the house, except where partitions are located. They are fastened up in the roof by key bolts placed through the metal end plates on same and the bolt hole D (Fig. 3), in roof rafters, thereby holding roof sections together at this point. It will probably be necessary to lift roofs slightly at the ridge, when putting these tie beams in place.

CEILINGS—These are used over rooms such as baths, small bed rooms, etc., which are cut down in width by the use of halls. The ceilings also cover these halls. The ceiling is made out of our Arctic Board, and is a complete panel, which simply drops down and rests on the ceiling moulding at the top of the side and partition sections.

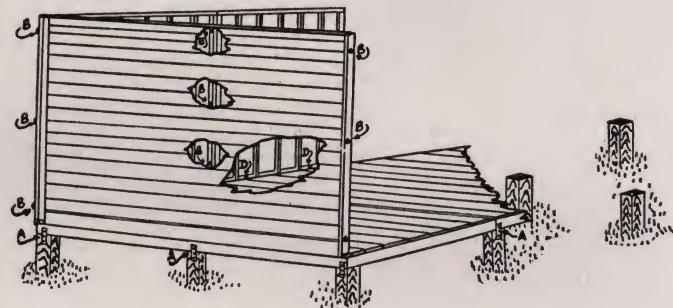


Fig. 2

SIDES—All sections are marked right and left and numbered from No. 1 up. Set first two corner sections on the floor, and key bolt together at B, fig. 2, using offset head bolts at corners only, as sent with the hardware. (A washer should be placed on each bolt before driving key.) Key bolt next intermediate section in place, using button head bolts. Complete opposite corner and add sections evenly on each side, placing in partitions as side sections build up to them, as shown and numbered on the plan. Above all 10 foot cross partitions, tie beam C, fig. 3, should be used. When all side and end sections are in place, bolt on gable pieces or peaks above each end section. **ROOFS**—Place end roof sections on plate, Fig. 3. By supporting same with sticks at Q, R and S, the section may easily be pushed into place. See that the projecting siding on peak fits tightly against roof rafter. Support first roof section by stick T, fig. 3, until opposite section is pushed into place, and bolted at G-G, and the two places at eaves, to hold roofs to side walls. Continue until all roofs are in place.

PORCHES—The floors are set on posts. On 8 foot wide porches, these floors will be $6\frac{1}{2}$ inches below level of main house floors. If clapboard porch, erect end and side sections next, screwing ends to house, and key bolting corners.

Roofs are now put in position. $2\frac{1}{4}$ inch screws are put through the ridge or back edge of roof into the side walls of the house at the five foot joints. Roofs of clapboard porches are key bolted to the side sections of the porch. Open porches are supported at the front edge of roof by posts, using an angle iron at the bottom of each post, and a screw at the top of post into front plate of roof.

Nail the $1\frac{1}{4} \times 1\frac{3}{4} \times 5$ foot strips against the house, directly under the back ridge of porch roof. Be sure to space nails so that they go into the interior studs. This strip is designed to support the back of roof, the $2\frac{1}{4}$ inch screws being used just to hold the roof to the house. Put the side and corner mouldings on clapboarded porches, roof casings on 8 x 10 foot or larger porches. Where an 8 foot side porch is placed in a corner formed by a valley, a special flashing is provided to follow the pitch of the porch roof and make tight the joint between the porch roof and the side wall of the house. On all the 8 foot wide porches, $\frac{3}{4} \times 5$ inch boards are sent to fill in space between porch floor and water-table on side walls, next to house.

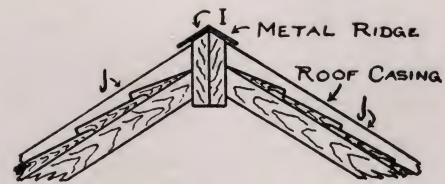


Fig. 4

FLASHINGS, MOULDINGS, ETC.—Screw in place the wood mouldings wherever the side sections join, and also the wood casings at each corner. At all roof section joints cover with roof cement, sent for this purpose, and nail on the metal roof casings (Fig. 5), using nail holes punched at sides of casings (not through top). Be sure also, to put roof cement under end roof casings, where they come together at the ridge. It is important that all roof casings go as far up to the ridge as possible.

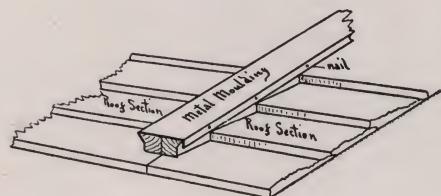


Fig. 5

Tack on ridge I, (Fig. 4). If there is a valley, a lead flashing is furnished. This should be tacked down tightly around the flashings and ridge, but be sure to put roof cement under same before tacking down. Next put on the large end roof casings which terminate the ends of the roof and give it an overhang effect. Be sure that the roof casings on the 8 x 10 foot or larger porches go up under the main house roof overhang as far as possible.

$1\frac{1}{4} \times \frac{1}{4}$ inch lattice is nailed over inside side and roof section joints, also along the ridge inside, as trim.

LEVELING DOORS—All doors are fitted to shut properly and if after setting up your house it is found that they do not line up, raise a corner of section as shown at X (Fig. 6) if door binds at threshold, or opposite corner of section if door binds at header. By wedging a shingle between foundation and floor beam it will generally raise the section enough to make the door hang right.



Fig. 6

IMPORTANT—Bolt and screw holes are bored, and care should be taken to see that all places are taken care of. Be sure that screws are used at E (Fig. 3), as these screws are intended to properly secure roof at the gable ends, and are very important, also the screws that go through the side sections into the floor. These screw holes are at D (Fig. 2), and are in all side and partition sections, and on clapboarded porches. Metal braces across the corners of house at plate are also very important, and should never be overlooked, A (Fig. 3).

AFTER ERECTION—After building is erected go over all key bolts and see that all wedge keys are driven in tightly. (To remove a wedge key, pull end of key with fingers and tap on head of bolt).

HARDWARE—Hardware is either packed in a box or in a floor section. Each package of hardware is labelled, telling just where it is used.

MARKING—All sections are lettered and numbered; as L for Left, R for Right, B for Back, F for Front and E for End and care should be taken that these sections are put in the exact location. Peaks have the same lettering or numbering as the end or partition sections that they are over.

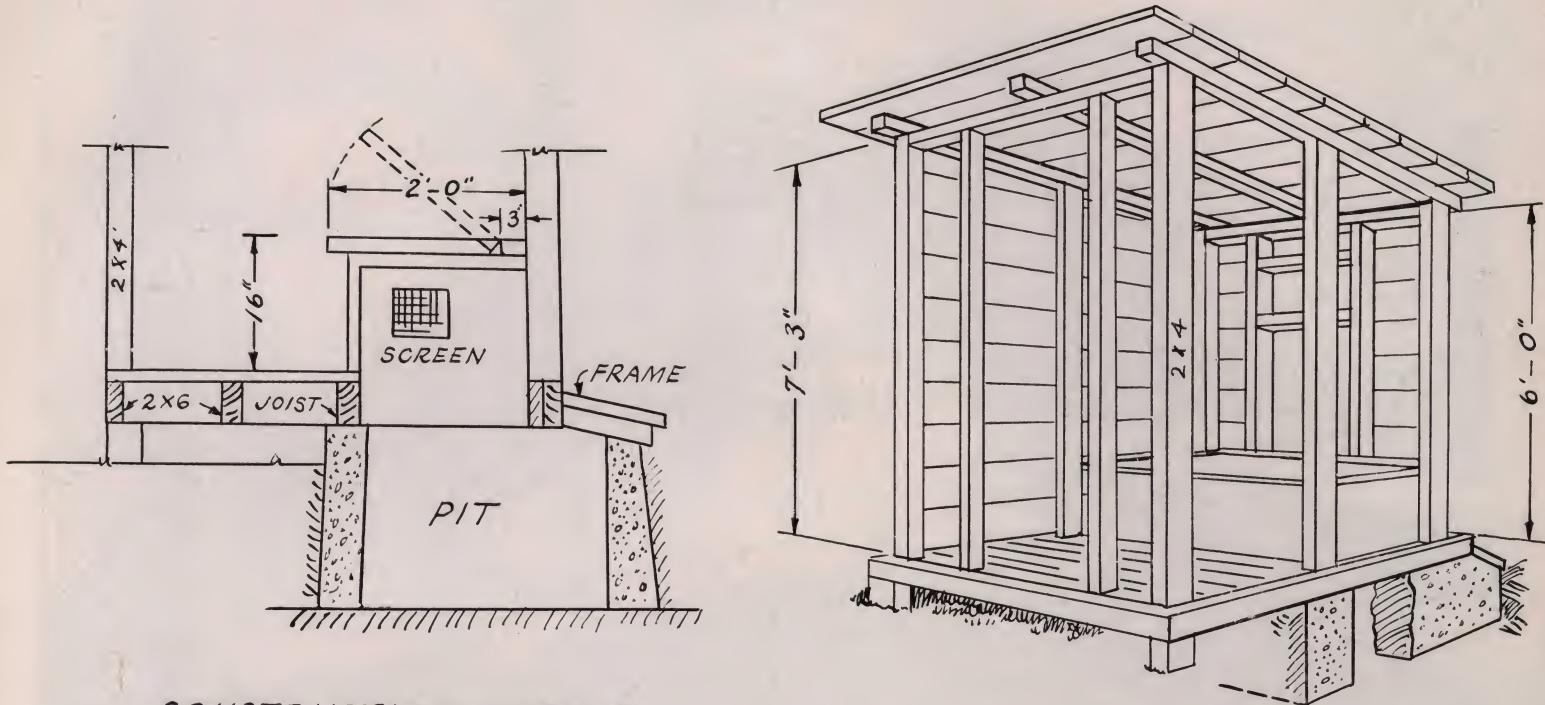


Summer Cottage

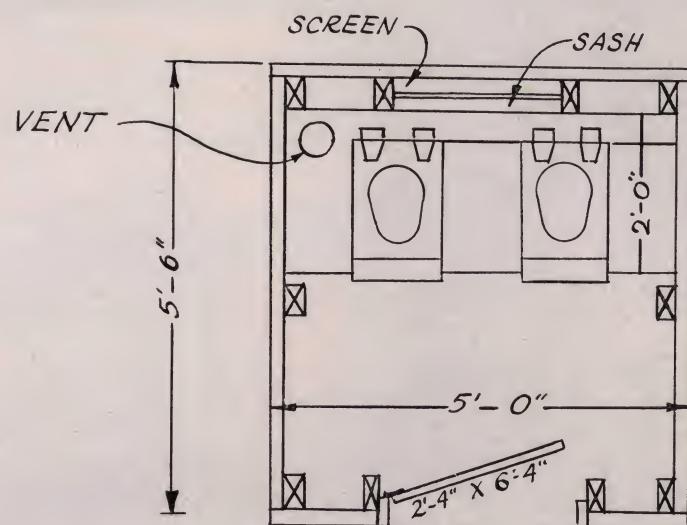
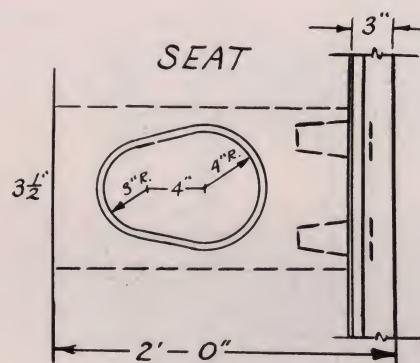
*Courtesy Western Pine Association,
Portland, Oregon*



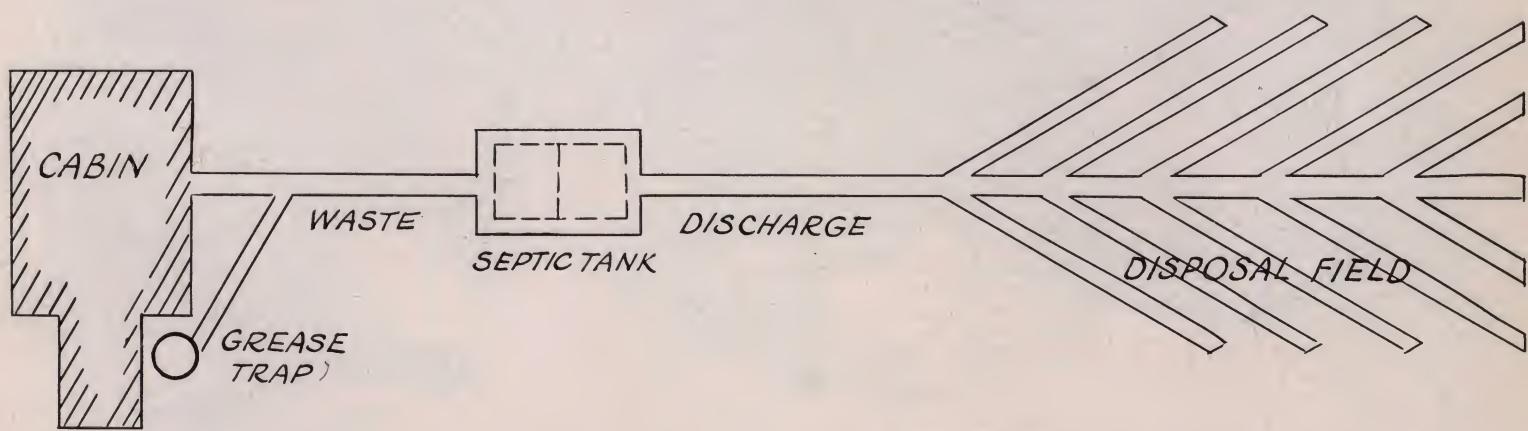
Knotty Ponderosa Pine Paneled Walls and Ceiling



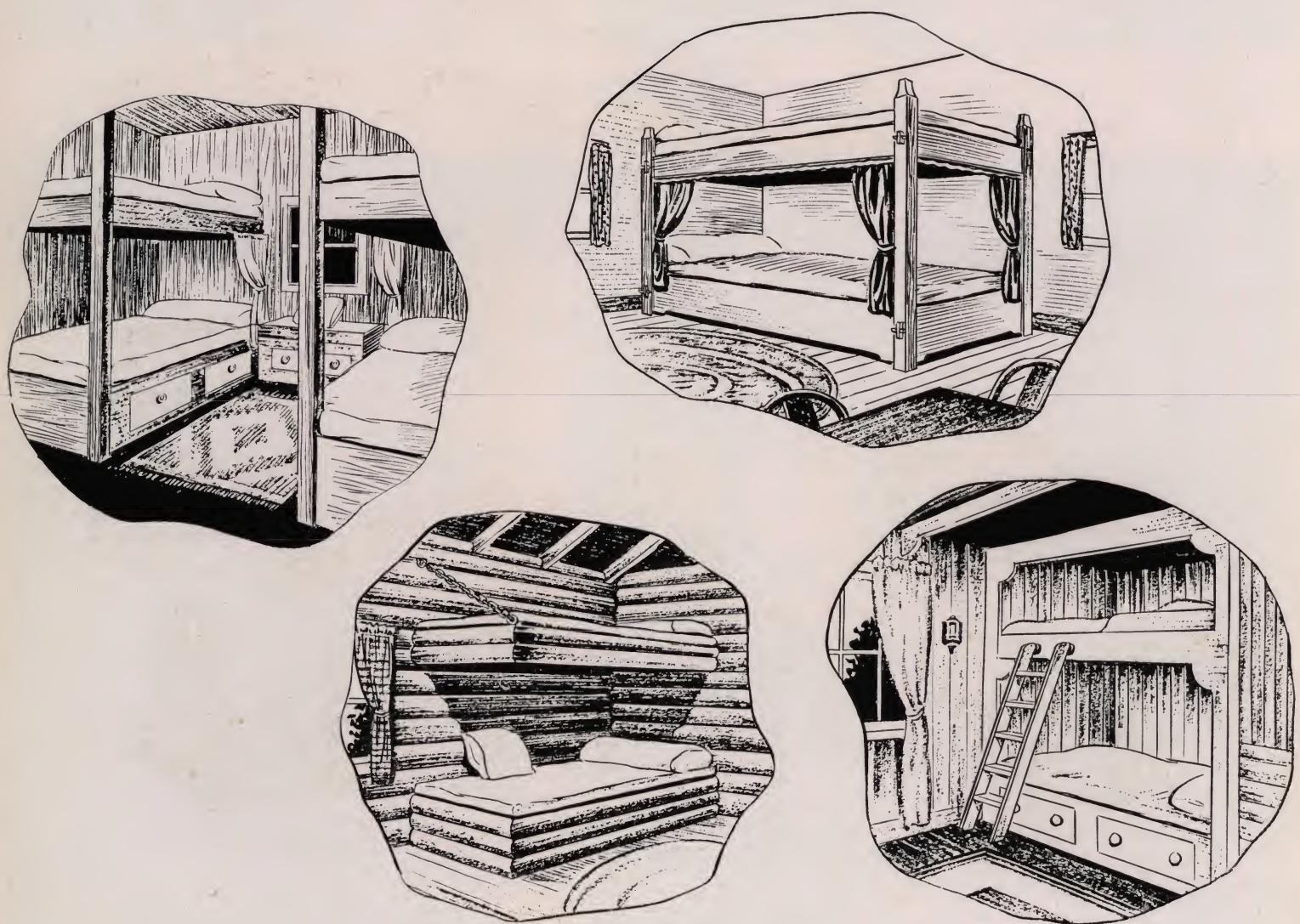
CONSTRUCTION DETAILS



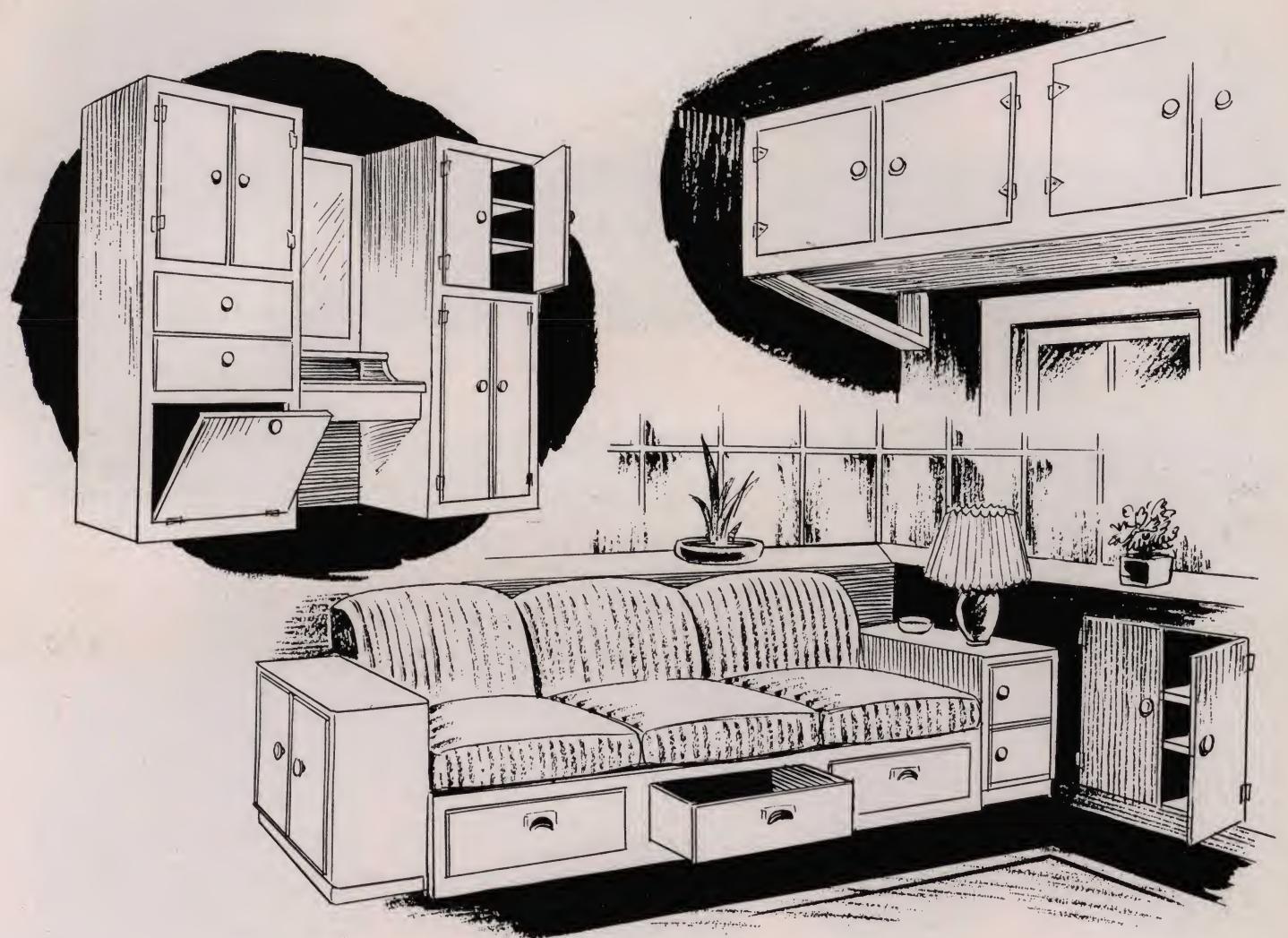
SANITARY OUTHOUSE



SEWAGE DISPOSAL PLAN



Interior Suggestions



Interior Suggestions

Outdoor Furniture



Barbecue Table: Top, 30 x 72 inches; 30 inches high.

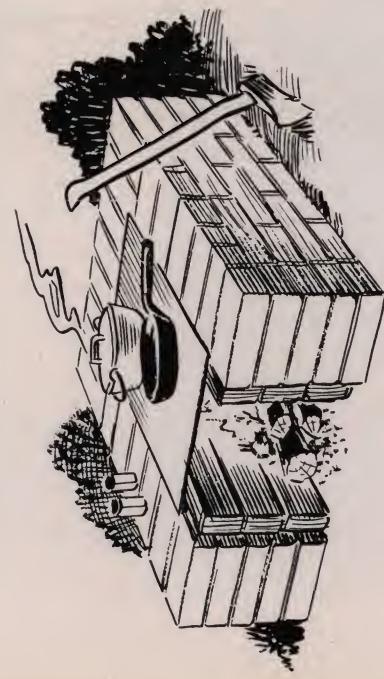
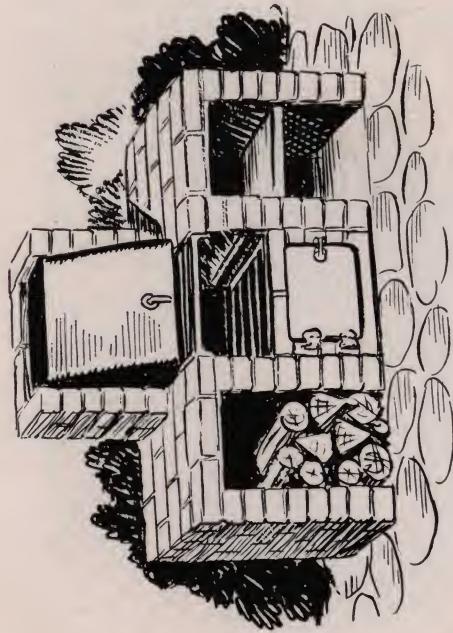
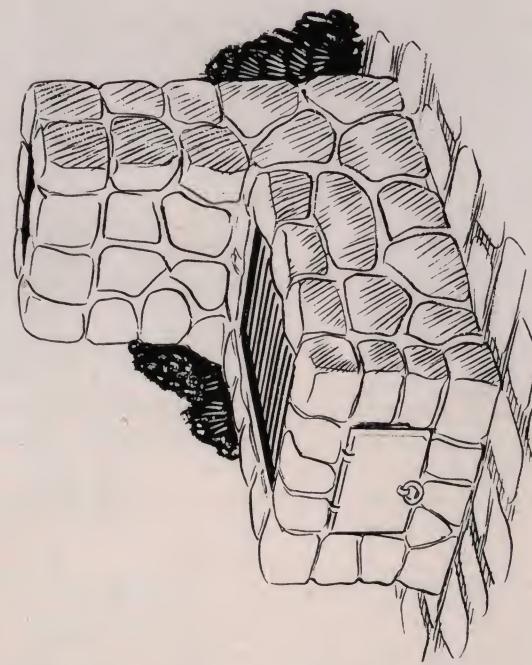
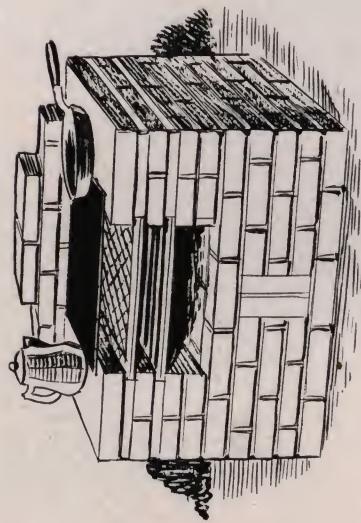
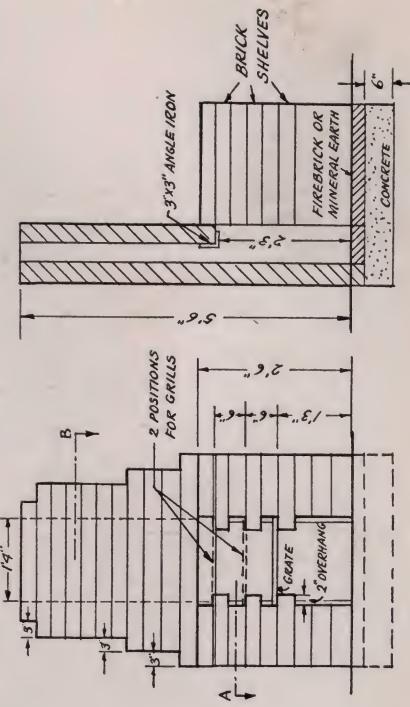
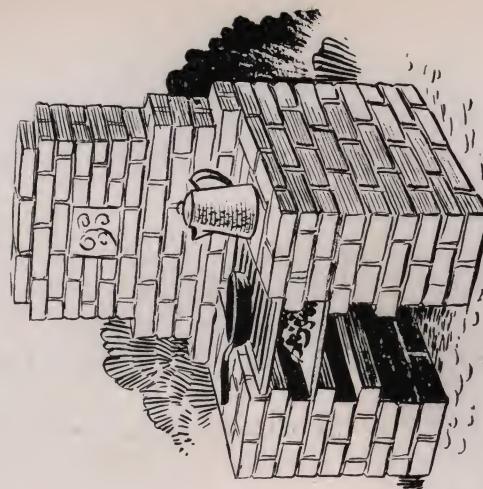


Settee: 17 inches deep, 42 inches wide.

Armchair: 17 inches deep, 24 inches wide.

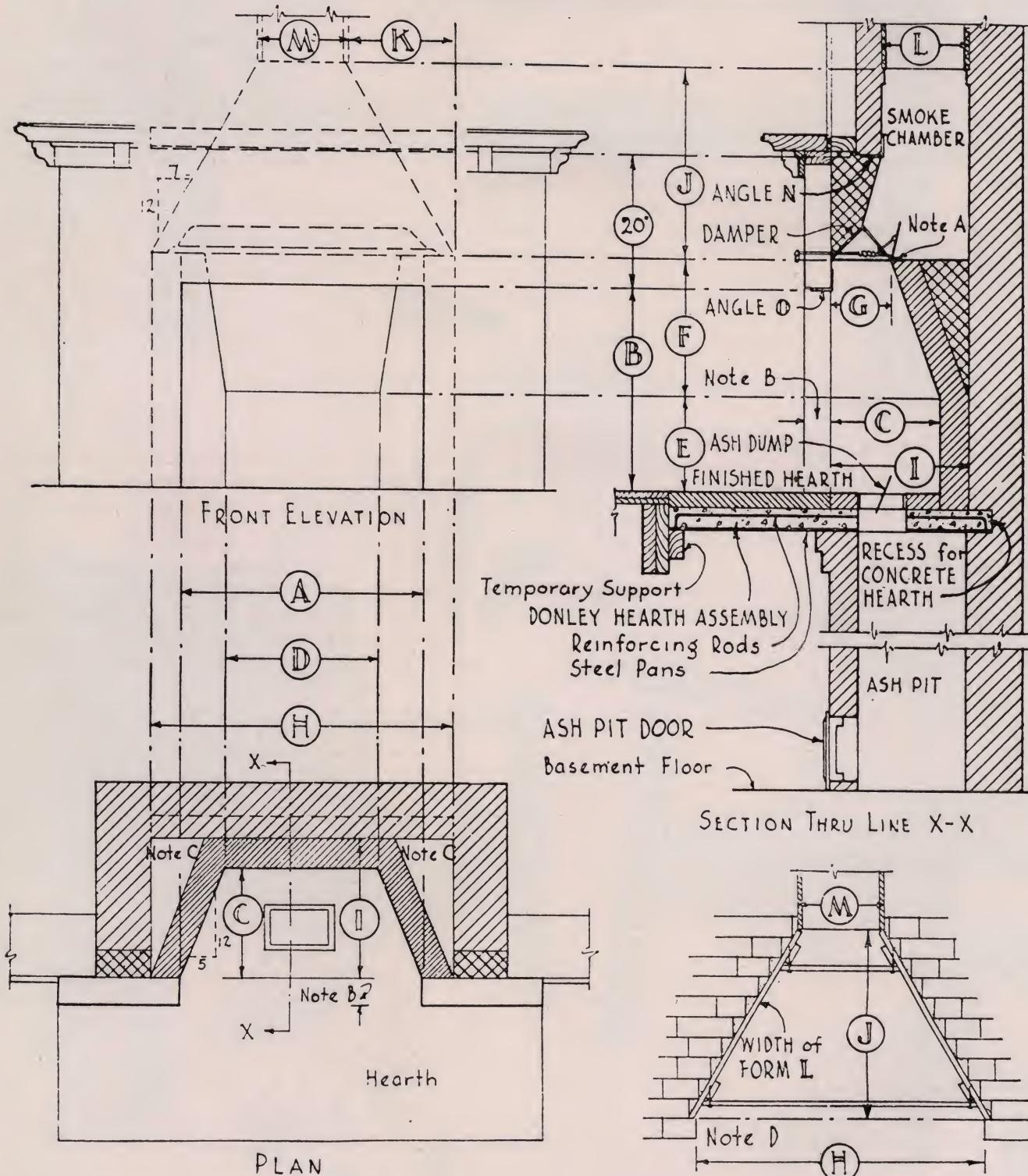
Courtesy Thyer Lumber Company, West Toledo, Ohio

Outdoor Barbecue Suggestions



CONSTRUCTION SKETCH OF SUCCESSFUL FIREPLACE

See Table of Dimensions on Opposite Page



BUILDING A SUCCESSFUL FIREPLACE

BY THE DONLEY BROTHERS CO. OF CLEVELAND, O.

PLANS ARE FURNISHED—Difficulty is avoided by sticking quite closely to the plan, elevation and profile shown. This is a convenient solution since a sheet with similar plans, directions and construction hints is attached to the crate of every Donley Damper. We do not claim, by any means, that it is impossible to build a successful fireplace from other plans. However, the design here offered represents a consensus backed by long experience. It permits a wide range of adaptation to exterior design. We see no reason to seek variation in interior proportions affecting the actual conditions of combustion.

TWO METHODS OF BUILDING—The generally accepted practice, and the one which we recommend, is to complete the rough brick work of the fireplace from ash-pit footings to chimney top before undertaking the installation of the finished interior and front. There is also a practice of finishing the fireplace in sequence as the brick work advances. We believe that the completion of a fireplace is a task of sufficient importance to command attention apart from the general progress of rough brick work—which may be entrusted to a man of lesser skill. The second method mentioned may exclude the service of fireplace specialists—whether engaged in the mantel and tile trade or in general masonry—whose concentrated experience is a powerful factor for better fireplaces.

THE ASH-PIT—Where the building has a basement and the ash-pit is integral with the foundation, enlarged footings may

be necessary to avoid unequal settling—the result of concentrated weight of a heavy chimney. If the ash-pit is separate from the foundation, the same problem of unequal settlement must be considered. In buildings without basements, care must be taken to have the footings well below frost level as well as adequate to carry the load of the chimney. Access for removal of ashes, in such cases, will be at the exterior ground level, where the Ash-pit Door will be installed. Choice of a door, for either outside or inside location, should be governed by convenient shovel size, which means 10 by 12 inches or larger.

HEARTH CONSTRUCTION—It is important that the hearth, including the fore-hearth outside the fireplace area, be wholly supported by the chimney. Compromise support, in which the floor is made to carry part of the load, entails risk of cracking the hearth, should floor and masonry settle unevenly—or in case of shrinking or warping of floor timbers.

The cantilever principle must be employed in a properly supported hearth and this means a hearth slab of adequate strength. The design calls for a reinforced slab, $3\frac{1}{2}$ inches thick. In helping to make better hearth slab construction convenient to the fireplace builder, the Donley Brothers Co. has developed an assembly of corrugated metal forms and of reinforcing rods, which save time and lend certainty to the operation. Six corrugated metal pans, by overlapping, serve for almost the whole range of hearth sizes.

Notes on Donley Fireplace Construction Sketch

Note A—The back flange of the damper must be protected from intense heat by being fully supported by the masonry. At the same time, the damper should not be built in solidly at the ends but given freedom to expand with heat as shown in the front elevation on the opposite page.

Note B—The drawing indicates the thickness of the brick fireplace front as four inches. However, no definite dimension can be given for this because of the various materials used—marble, stone, tile, etc., all having varying thicknesses.

Note C—The hollow, triangular spaces indicated in the plan, behind the splayed sides of the inner brickwork should be filled to afford solid backing. If desired to locate a flue in

either space, the outside dimensions of the rough brickwork should be increased.

Note D—A good way to build a smoke chamber is to erect a wooden form consisting of two sloping boards at the sides, held apart by spreaders at the top and bottom. Spreaders are nailed upward into cleats as shown. The letters H, M, and J correspond to letters in the elevation and in the Table of Dimensions. The form boards should have the same width as the flue lining.

Note E—A steel smoke chamber is made by the Donley Brothers Co. and furnished where desired.

Note F—The sectional view opposite shows a rotary control type of Donley Damper.

Table of Fireplace Dimensions

DIMENSIONS												EQUIPMENT								ACCESSORIES				FURNISHINGS			
FINISHED FIREPLACE OPENING						ROUGH BRICK WORK						ACCESSORIES				FURNISHINGS				FIRE BASKET				FIRE SCREEN			
WIDTH	HEIGHT	DEPTH	BACK	VERTICAL BACK WALL	SLOPED BACK	THROAT	WIDTH	DEPTH	SMOKE CHAMBER	SLOPE OF SMOKE CHAMBER	STD. RECTANGULAR FLUE LINING	STD. ROUND FLUE LINING	OUTSIDE DIMENSION	INSIDE Dia.	HEARTH ASSEMBLY	DAMPER	ROTARY CONTROL	DAMPER	POTTER CONTROL	ASH DUMP	ASH PIT DOOR	STEEL ANGLES	LENGTH IN INCHES	FIRE BASKET	FIRE SCREEN	ANDIRONS	FIRE SET
A	B	C	D	E	F	G	H	I	J	K	L	M	Φ	No	No	No	No	InxIn	N	O	No	No	No	No	No	No	No
26	24	16	13	14	14	8 $\frac{3}{4}$	39	20	24	15	8 $\frac{1}{2}$ x 8 $\frac{1}{2}$	10	72	330	230	58	10x12	A 36	A 30	24							
28	28	16	15	14	18	8 $\frac{3}{4}$	42	20	25	14 $\frac{1}{2}$	8 $\frac{1}{2}$ x 13	10	72	330	230	58	10x12	A 42	A 36	24							
30	30	16	17	14	20	8 $\frac{3}{4}$	42	20	25	14 $\frac{1}{2}$	8 $\frac{1}{2}$ x 13	10	72	330	230	58	10x12	A 42	A 36	28							
32	28	16	19	14	20	8 $\frac{3}{4}$	44	20	26	15 $\frac{1}{2}$	8 $\frac{1}{2}$ x 13	10	72	330	230	58	10x12	A 42	A 36	28							
34	30	16	21	14	20	8 $\frac{3}{4}$	46	20	28	16 $\frac{1}{2}$	8 $\frac{1}{2}$ x 13	12	72	336	236	70	10x12	A 42	A 42	30							
36	30	16	23	14	20	8 $\frac{3}{4}$	46	20	28	16 $\frac{1}{2}$	13 x 13	12	72-84	336	236	70	10x12	A 48	A 42	30							
40	30	16	27	14	20	8 $\frac{3}{4}$	50	20	32	18 $\frac{1}{2}$	13 x 13	12	72-84	342	242	70	10x12	A 48	A 42	34							
42	30	16	29	14	20	8 $\frac{3}{4}$	54	20	35	20 $\frac{1}{2}$	13 x 13	12	84-96	342	242	70	10x12	B 54	A 48	34							
48	33	18	33	14	23	8 $\frac{3}{4}$	59	22	40	23	13 x 13	15	96	348	248	70	10x12	B 60	B 54	40							
54	36	20	37	14	26	13	67	24	42	24 $\frac{1}{2}$	13 x 18	15	96	354	254	70	12x15	B 66	B 60	40							
60	39	22	42	14	29	13	71	26	45	26 $\frac{1}{2}$	18 x 18	18	96	360	260	70	12x15	B 66	B 66	57							
72	40	22	54	14	30	13	83	26	56	32 $\frac{1}{2}$	18 x 18	18	Special	372	272	70	12x15	C 80	C 80	57							

Notes on Use of Dimension Table

Note 1—A ruler is a convenience in using this table. Select the number in the left hand column that corresponds to your proposed width of fireplace opening. Lay the ruler on the line below it and read the figures to the right on the same line. They give you the complete recommended dimensions and installation for the fireplace of the chosen width of opening.

Note 2—Under the heading Accessories, the first two columns refer to two different types of damper and are, of course, alternates. Rotary control dampers have numbers beginning with 3, poker beginning with figure 2. An order that simply calls for a given size in inches is not sufficiently clear. Order dampers by number.

Note 3—Under Furnishings, the size of fire basket is specified, since it is important to have a basket that fits the hearth plan. The three other columns are left blank since screen, and-iron and fire set are matters of taste and preference. These columns remind you not to omit these three essentials to fireside satisfaction.

ROUGHED-IN FIREPLACE—The plans and table of dimensions indicate the relation in size between the rough enclosure and the finished fireplace.

SMOKE CHAMBER—At damper level, the enclosure narrows to form the smoke chamber. It is important that the slope of its two sides be identical, the flue taking off from the center. Necessary sloping to bring the flue to its place in the stack is accomplished in the flue, not in the smoke chamber. A form consisting of two boards with connecting braces helps to give the brick a proper slope and assists in providing the important smooth surface which assists in discharge of smoke.

FLUE CONSTRUCTION—Important considerations in proper building of a flue are (1) sufficient size, the net flue area being not less than 1/12 the area of the fireplace opening, (2) sufficient height, 25 feet is desirable with projection of not less than 3 feet above the highest point of the roof, (3) smooth unobstructed passage for products of combustion, and (4) slope, if any, not to exceed 7 inches to the foot.

Rectangular		Round	
Outside Dimensions of Flue Linings, Inches	Inside Cross Sectional Area of Flue Linings, Sq. In.	Inside Diameter of Flue Linings, Inches	Inside Cross Sectional Area of Flue Linings, Sq. In.
4 1/2 x 8 1/2	23.56	6	28.27
4 1/2 x 13	38.19	8	50.26
7 1/2 x 7 1/2	39.06	10	78.54
8 1/2 x 8 1/2	52.56	12	113.0
8 1/2 x 13	80.5	15	176.7
8 1/2 x 18	109.69	18	254.4
13 x 13	126.56	20	314.1
13 x 18	182.84	22	380.13
18 x 18	248.06	24	452.3

Rectangular No Allowance for Radial Corners

The table shows standard sizes of flue linings, rectangular and round, in relation to their net areas in square inches. This information is important, since clay product manufacturers list their rectangular flue linings according to exterior dimensions and round flue linings by interior dimensions. By follow-

ing this table the relationship of not less than one to twelve can be maintained between net flue area and area of fireplace opening.

Flue linings should be tightly cemented together. This is especially important where more than one flue occupies a single stack. Otherwise there may be suction of smoke down one flue while smoke ascends in the other. A minimum of four inches of masonry between parallel flues is likewise recommended. Unequal projection of flues above the stack is a safeguard against smoke pouring out of one flue and down the other. Proximity of a tree or high building may be a hazard to free discharge of smoke.

INTERIOR CONSTRUCTION—A successful fireplace is one in which the fire burns brightly with a maximum of warmth and freedom from discharge of smoke into the room. Every feature of the plans and discussions offered here contribute to this result.

THE HEARTH PLAN—Count Rumford, whose work as a fireplace designer has never been surpassed, conceived the fireplace interior as a sort of reflector. His first measure was to splay the sides and thus narrow the hearth from front to back. Donley plans call for a splay of 5 inches per foot.

BACK IS SLOPED—The reflector concept is further carried out by sloping the back of the fireplace forward from a point 14 inches above the hearth to the level of the damper. This deflects both flame and heat forward. Products of combustion pass off through the damper, but a maximum of heat is deflected into the room.

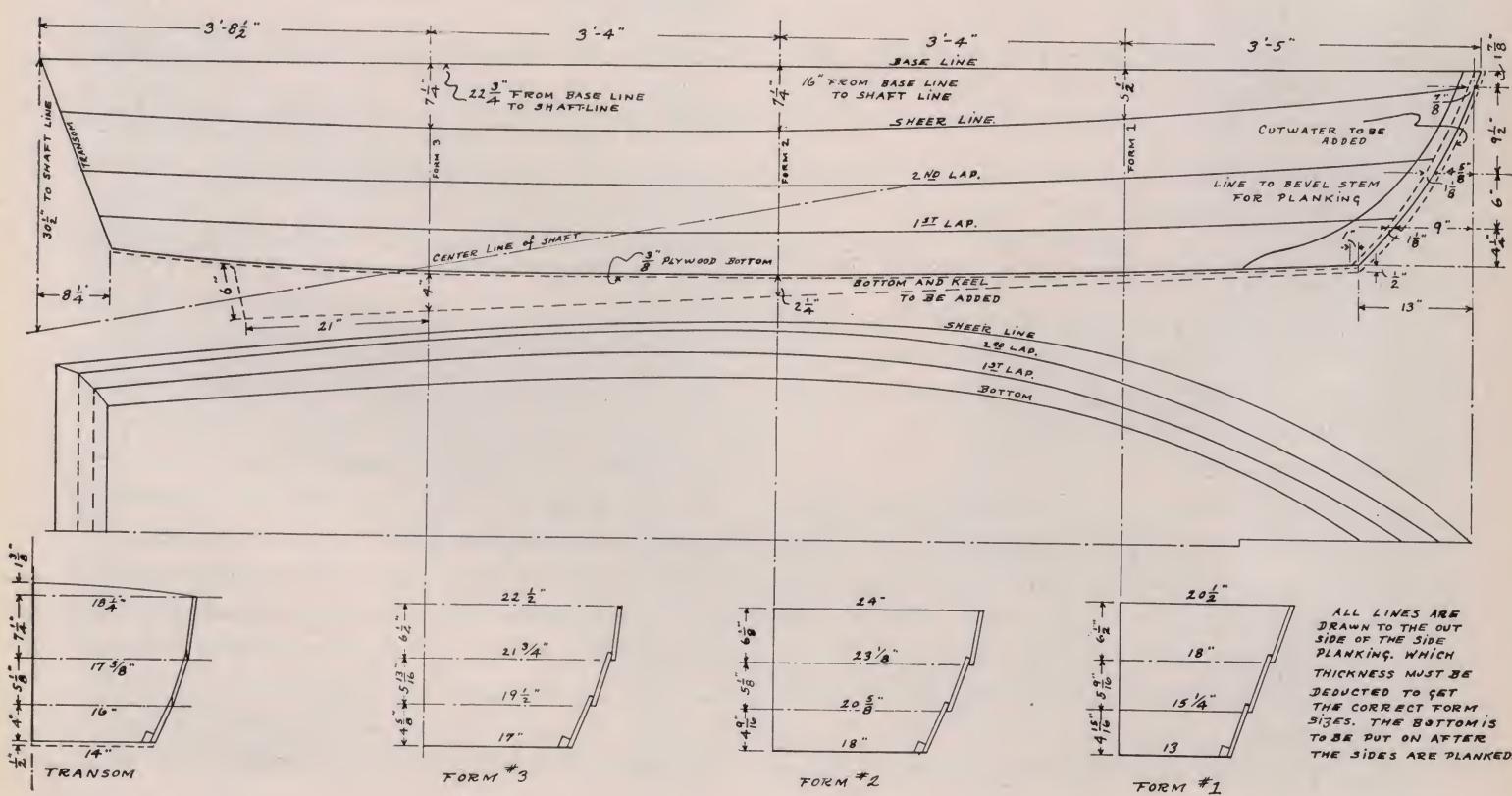
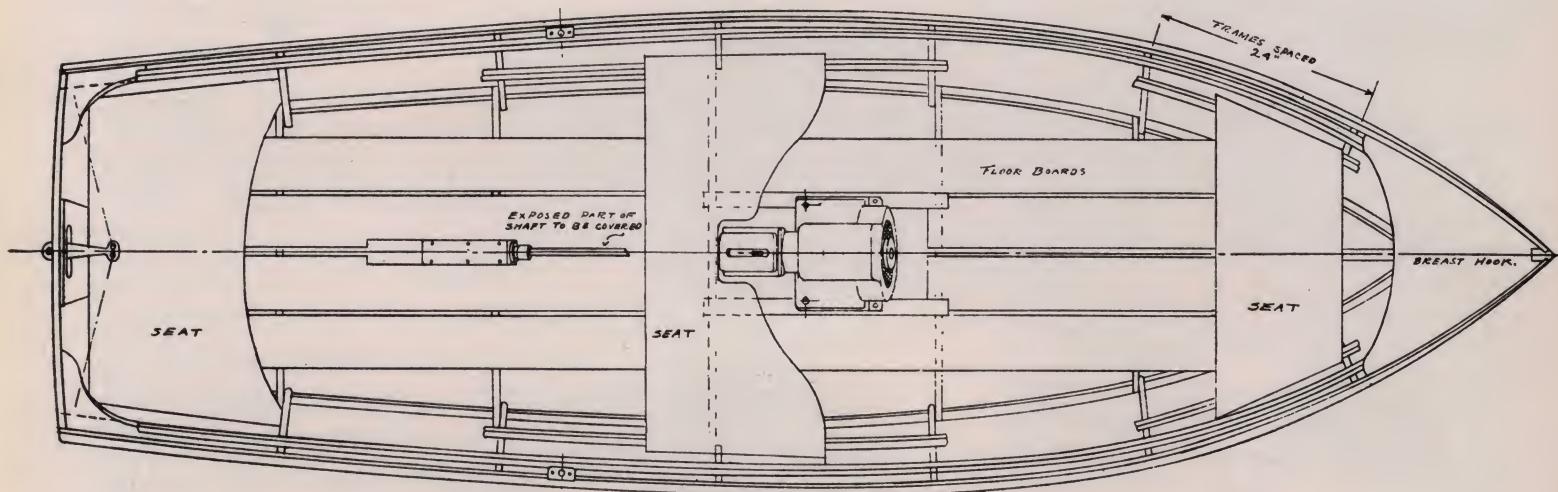
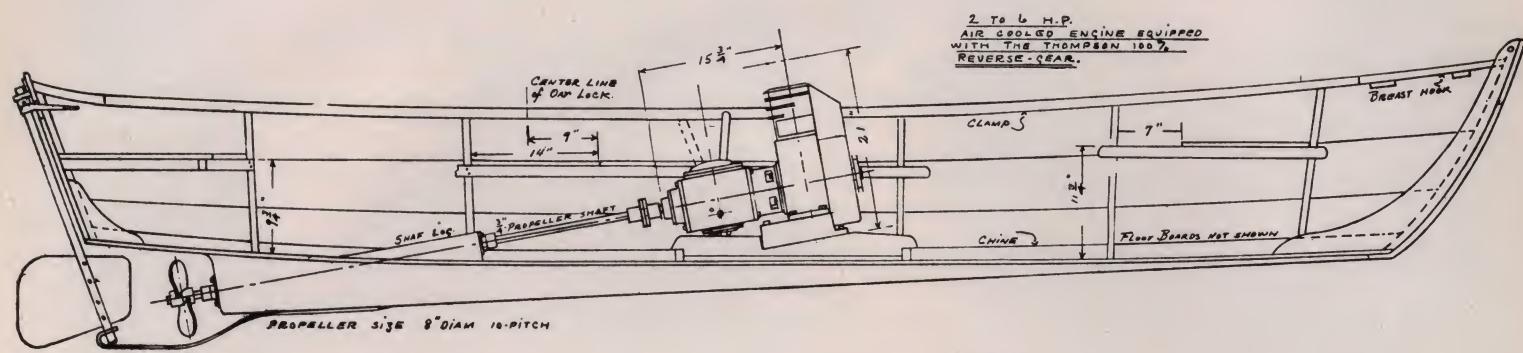
DAMPER PLACED FORWARD—The sloped back contributes to other important design factors. It brings the damper forward of and not directly under the flue and to a position just back of the breast wall of the fireplace. It leaves room for an ample smoke shelf behind the damper. Where the damper has a rear position no smoke shelf is possible. Soot falling down the chimney comes through the damper opening and often into the room. There is no barrier to downdraft and smokiness ensues. The rear position sacrifices much heat. Sloping back, damper well forward and a roomy smoke shelf—all important—all three co-ordinated in Donley designs. None can be sacrificed without impairing the other. The smoke shelf with the upturned damper plate forming a wall at its front, forms a barrier to downdraft, which is trapped and eddies upward in the ascending column of smoke.

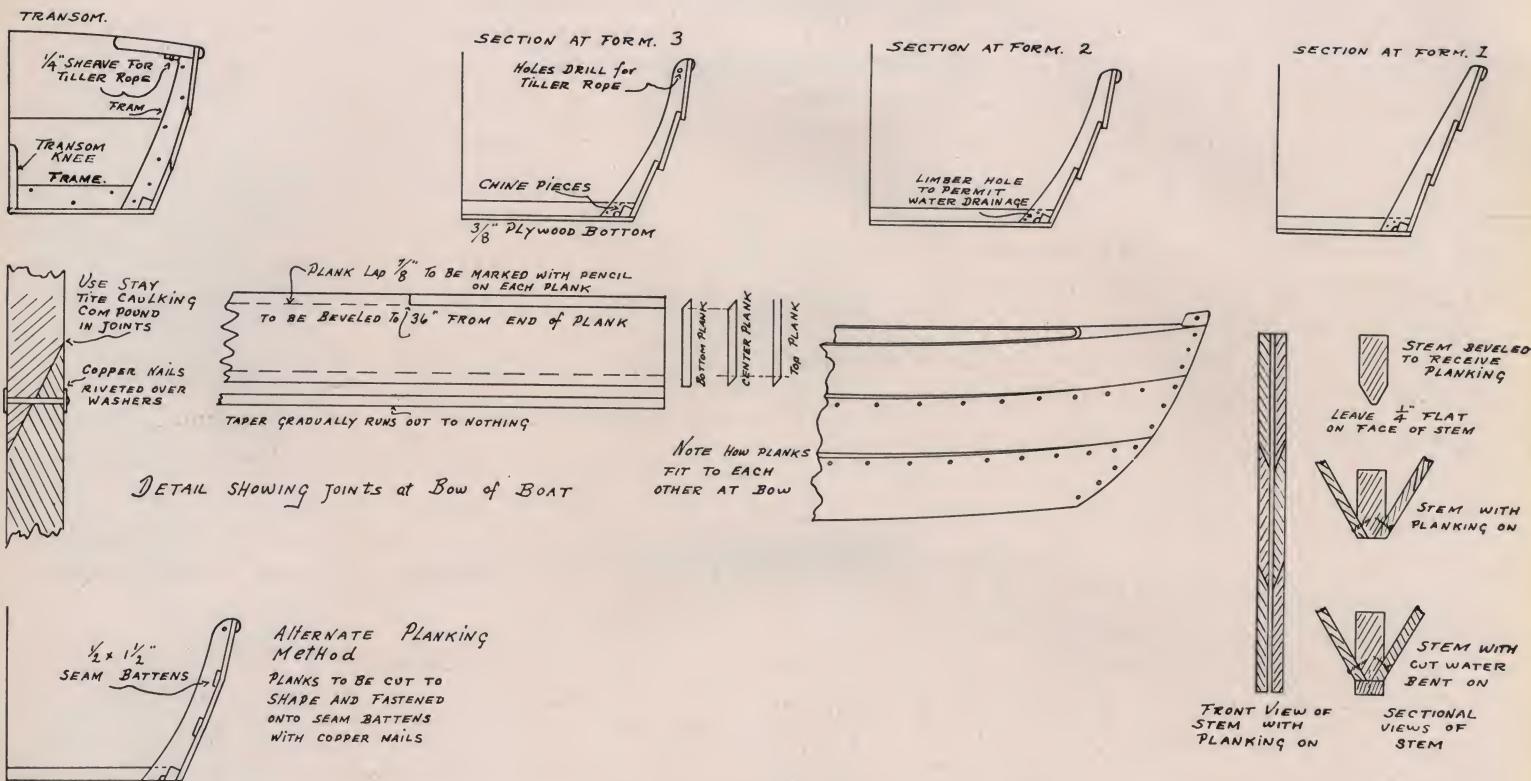
The recommended vertical position of the damper is four to eight inches above the breast wall of the fireplace (which is supported by a stiff steel angle). To sacrifice this breast wall margin in order to support the masonry by a damper flange is to incur risk of issuance of smoke into the room.

CHOICE OF DAMPER—The damper must be a co-ordinated part of a properly designed fireplace interior. It must afford a smooth, metal throat for the passage of smoke and fumes. It must have a vertical front flange to permit it to rest snugly against the masonry of the fore-wall. Its opening must be narrow, from front to rear, to continue the plane of the back slope and leave room for the smoke shelf. It must have a valve plate that is removable and that operates for the full width of the fireplace and forms an effective front barrier along the smoke shelf. Its sides must be splayed to conform with the fireplace design. It must be easy to adjust, easy to close during seasons when the fireplace is not in use. The Donley Damper was designed with all these objects in view. Choice of the means of control is a matter of preference. Poker control is less conspicuous. Rotary control is easier to operate.

BOAT BUILDING DETAIL

14 Foot Lap-Strake Skiff





SPECIFICATIONS

14' Lap-Strake Skiff

This boat should be built up-side-down. A good solid platform will make the building of this boat much easier.

Two $2'' \times 6''$ or $4'' \times 4''$ timbers, long enough for the boat, should be laid across two stout "horses," leveled and securely fastened in place. Short pieces of $2'' \times 4''$, about $36''$ long, should be fastened across the ends. One end to be notched out to receive the stem. Stretch a strong cord down the center from end to end which will serve as the base line. Set up each form in its respective place, making sure that the center comes over the base line and that they are perfectly square across. Legs should be added to the forms the lengths as given on the lines drawing from the base line to the sheer line. The transom should be made and mounted on brackets to hold it at the proper height and angle. Make sure that the spacing of the forms are right, particularly at the stem and the transom.

Care should be taken at the stem to make sure it has the proper rake to it, and that it is securely braced and plumb. After all the frames, transom and stem have been securely braced, bend a batten around the sides to make sure that the lumber for the top plank will be long enough, if not, adjust so that it will. Do the same over the bottom.

Stem, $1\frac{3}{8}''$, white oak or yellow pine. Cut to shape

as shown and beveled to receive the planking, see detail drawings.

Transom, $\frac{3}{4}''$ mahogany, oak or fir, built-up of two pieces and fastened together with a frame securely fastened along the edges; this frame to be notched to receive the chines.

Forms, cut to shape and built-up of $\frac{3}{4}''$ scrap lumber.

Chine strips, $\frac{3}{4}'' \times 1\frac{1}{2}''$, white oak, fir or cypress, to be cut to shape. The shape to be gotten by bending the lumber for the chine pieces around the forms, mark out with a batten and then cut to shape. The chines are to be securely fastened into the transom frame and into the stem.

Planking, $\frac{1}{2}''$ and $\frac{5}{8}''$ white cedar, fir or cypress. Study drawing No. 3 very carefully so as to get a clear idea of how the bevels are to be cut. The first plank to be put on is that next to the bottom. The bevels for the lap is to be cut and the lap marked with a pencil before the plank is put on. Fasten the planking securely into the stem and along the chine every 3 inches with $1\frac{1}{4}''$ No. 10 screws. If the builder is not familiar with lap-strake construction, we suggest that he practice making these joints with two odd pieces of lumber before attempting the planking. The next plank, or second lap, is to lap $\frac{7}{8}''$ over the first and should be beveled on both edges as shown in the detail drawing. This plank

should be fitted and all bevels adjusted with a small plane before attempting to fasten it on. After you are satisfied with the fit, clamp the plank in place and fasten into the stem with $1\frac{1}{4}$ " No. 10 screws, then rivet along the lap every 3 inches with copper nails riveted over burrs.

The top plank is put on in the same way. The only plank that will need to be cut to shape is the bottom one, this should have the same shape as the bottom. In fastening the first plank along the chines, be sure to set your fastening down far enough to allow for planing-off afterwards to receive the bottom.

Framing. The frames are to be fitted-in after the sides are planked over the forms. They are to be made from $\frac{3}{4}$ " stock same material as the planking. The shapes of these frames are gotten with the use of a thin wooden or cardboard template, and by laying a rule along the face of each plank and scribing along the other edge, the angle for each plank can be gotten. Cut out this template and fit, when the fit is satisfactory lay it on the framing lumber, mark and saw out. Fasten planking to the frames with $1\frac{1}{4}$ " No. 10 screws.

Bottom, $\frac{3}{8}$ " plywood. The chines and sides should be planed to receive the bottom before the framing is done, making sure that it is perfectly flat across, which can be determined with a straight edge. Saw off all frames projecting above the bottom and lay the plywood in place, tack temporarily and mark out the shape. Take off and saw the plywood to shape. Fasten it in place along the chines with 1" No. 9 screws spaced close together, use plenty of Dolfinite Caulking Compound in this joint.

Cutwater, $\frac{3}{4} \times 1\frac{1}{2}$ " w. oak, to be steam bent in place and nicely faired-off. Fasten with 2" screws.

Keel, $1\frac{3}{4}$ " oak or yellow pine, drilled for $\frac{3}{4}$ " shaft if the inboard engine is used. Fasten from the inside with 2" screws, care to be taken so fastenings do not interfere with shaft. If the boat is built for outboard or rowing, the keel should be made much smaller. Get measurements for keel from lines drawing.

Turn boat over allowing the forms to remain in place. Breast hook and knees, $\frac{3}{4}$ " and $1\frac{3}{8}$ " mahogany, or white oak, fitted and securely fastened in place.

Rub mouldings, $\frac{3}{4} \times 1\frac{1}{2}$ " mahogany, w. oak or spruce, to be tapered at the bow and securely fastened into the breast hook and transom knees. Fasten from the inside of the planking with 1" or $1\frac{1}{4}$ " screws.

REMOVE FORMS

Clamps, same as rub mouldings, neatly fitted into

breast hook and knees and fastened through each frame head with one 3" copper nail riveted on the inside.

Seats, $\frac{3}{4}$ " mahogany or spruce, as shown, or can be made of $\frac{1}{2}$ " plywood.

Floor boards, $\frac{3}{4}$ " spruce, fir or cypress, as shown.

Shaft log and engine beds, w. oak or yellow pine. Proper angle to be gotten from lines drawing. A metal shaft log may be used if preferred. The engine beds must be fitted for the engine used.

Rudder, $\frac{3}{4}$ " mahogany, spruce or fir, as shown. To be controlled with a $3/16$ " tiller rope running through the transom over small pulleys and then through a hole in each frame head.

Seam Battens may be used instead of the lap-strake construction. To be fastened the same as the lap-strake job.

All plywood mentioned must be resin-bonded marine plywood, suitable for boats, ordinary plywood is not suitable.

All fastenings should be galvanized iron or brass. All other details to suit.

MATERIAL LIST

14 Foot Flat Bottom Skiff

- 6 pieces $\frac{1}{2} \times 8"$ — 14' long, sides
- 1 piece $\frac{3}{8} \times 3' \times 12'$, plywood
- 1 piece $1\frac{3}{8} \times 8" \times 48"$, stem, etc.
- 30 lineal feet $\frac{3}{4} \times 4"$, frames
- 1 piece $\frac{3}{4} \times 6"$ — 14' long, chines
- 1 piece $\frac{3}{4} \times 10"$ — 8' long, transom
- 4 pieces $\frac{3}{4} \times 1\frac{1}{2}"$ — 14' long, clamps, etc.
- 1 piece $\frac{3}{4} \times 1\frac{1}{2} \times 30"$, cutwater
- 2 pieces $\frac{3}{4} \times 2"$ — 12' long, bottom frames
- 2 pieces $\frac{3}{4} \times 12"$ — 10' long, seats, etc.
- 1 pair oar locks
- 1 pair oars

FASTENINGS, ETC.

- 200 $1\frac{1}{4}$ "—No. 10 flat head screws
- 144 1"—No. 9 flat head screws
- 1 lb. $1\frac{1}{2}$ " heavy gauge copper nails
- $\frac{1}{4}$ lb. copper burrs to fit
- 20 3" copper nails with burrs
- 36 2"—No. 10 flat head screws.

PAINT, ETC.

- 3 lbs. Dolfinite Caulking Compound or equal.
- 1 qt. Anti-fouling bottom paint
- $\frac{1}{2}$ gal. paint for remainder of boat

TRANSOM.

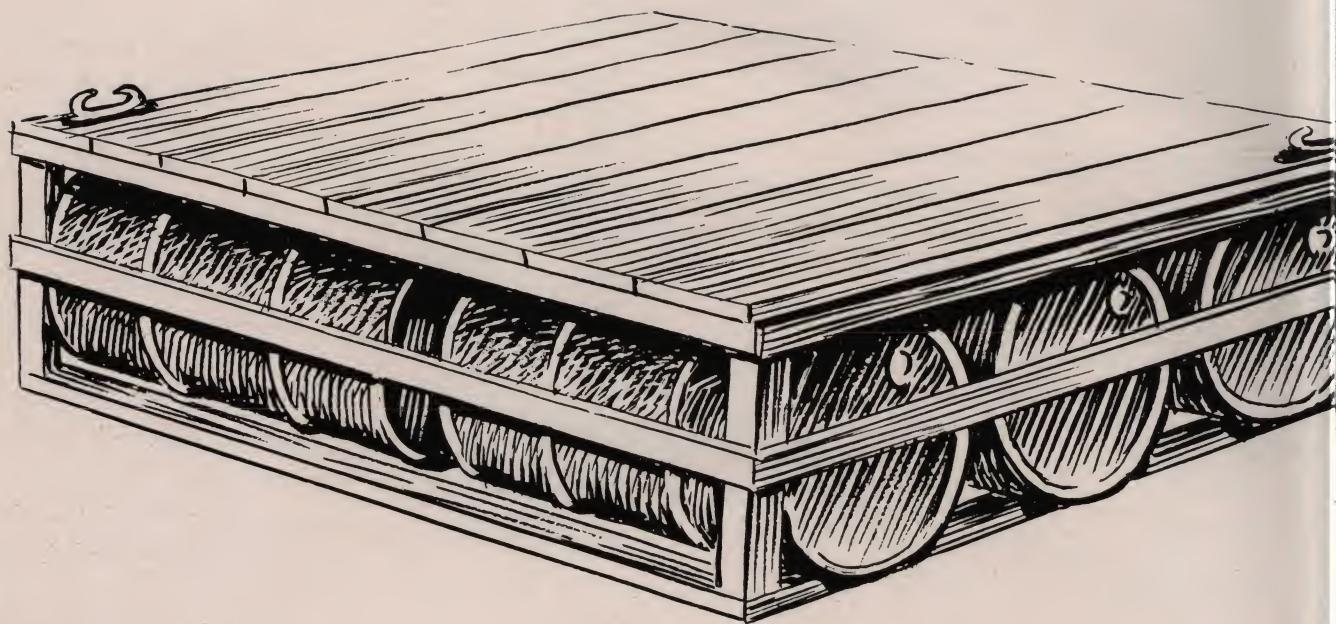
1/4" SHEAVE TO
TILLER ROP
TRANS.

TRANSOM
KNEE
TRANS.

USE S
TITE C
COM PL
IN JOH

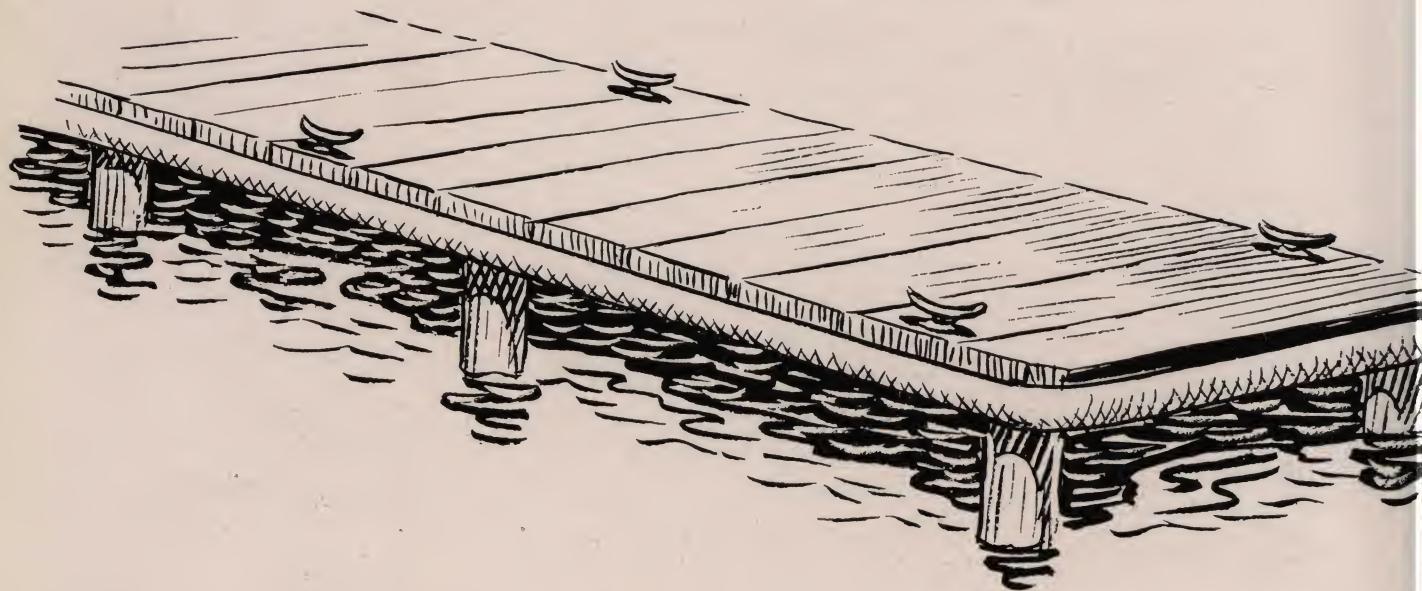
COPPE
RIVET WAS

1/2
SEAM



Float Suggestions

This popular type of float is readily constructed with the use of oil drums.



Dock Suggestions

The size of your dock will depend upon its being located in shallow or deep water. Old fire hose is used to great advantage as a fender.

